

\$ * * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:04:06 ON 07 JUN 2004

=> fil .bec

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.21 | 0.21 |

FULL ESTIMATED COST

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS, ESBIODBASE, BIOTECHNO, WPIDS' ENTERED AT 15:04:18 ON 07 JUN 2004
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

11 FILES IN THE FILE LIST

=> s zwf or (g6p or glc6p or glucose-6-phosphate) (w) (dh or dehydrogenase#) or g6pdh
FILE 'MEDLINE'

| | | |
|----|---------|--|
| | 77 | ZWF |
| | 432 | G6P |
| | 42 | GLC6P |
| | 255022 | GLUCOSE |
| | 1577538 | 6 |
| | 130881 | PHOSPHATE |
| | 13828 | GLUCOSE-6-PHOSPHATE |
| | | (GLUCOSE (W) 6 (W) PHOSPHATE) |
| | 25928 | DH |
| | 130027 | DEHYDROGENASE# |
| | 7954 | (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) |
| | 523 | G6PDH |
| L1 | 8098 | ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH |

FILE 'SCISEARCH'

| | | |
|----|---------|--|
| | 64 | ZWF |
| | 289 | G6P |
| | 61 | GLC6P |
| | 178856 | GLUCOSE |
| | 1384221 | 6 |
| | 136768 | PHOSPHATE |
| | 7563 | GLUCOSE-6-PHOSPHATE |
| | | (GLUCOSE (W) 6 (W) PHOSPHATE) |
| | 3957 | DH |
| | 79746 | DEHYDROGENASE# |
| | 5178 | (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) |
| | 490 | G6PDH |
| L2 | 5314 | ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH |

FILE 'LIFESCI'

| | | |
|----|--------|--|
| | 55 | ZWF |
| | 111 | G6P |
| | 12 | GLC6P |
| | 40890 | "GLUCOSE" |
| | 199733 | "6" |
| | 37937 | "PHOSPHATE" |
| | 2677 | GLUCOSE-6-PHOSPHATE |
| | | ("GLUCOSE" (W) "6" (W) "PHOSPHATE") |
| | 1025 | DH |
| | 25424 | DEHYDROGENASE# |
| | 1636 | (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) |
| | 190 | G6PDH |
| L3 | 1703 | ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH |

FILE 'BIOTECHDS'

98 ZWF
 26 G6P
 1 GLC6P
 29778 GLUCOSE
 93089 6
 17208 PHOSPHATE
 648 GLUCOSE-6-PHOSPHATE
 (GLUCOSE (W) 6 (W) PHOSPHATE)
 211 DH
 7784 DEHYDROGENASE#
 435 (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#)
 41 G6PDH
 L4 455 ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH

FILE 'BIOSIS'

85 ZWF
 514 G6P
 71 GLC6P
 265517 GLUCOSE
 1498872 6
 193549 PHOSPHATE
 18698 GLUCOSE-6-PHOSPHATE
 (GLUCOSE (W) 6 (W) PHOSPHATE)
 3202 DH
 131029 DEHYDROGENASE#
 13794 (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#)
 773 G6PDH
 L5 13932 ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH

FILE 'EMBASE'

67 ZWF
 397 G6P
 38 GLC6P
 210509 "GLUCOSE"
 894345 "6"
 160904 "PHOSPHATE"
 13211 GLUCOSE-6-PHOSPHATE
 ("GLUCOSE" (W) "6" (W) "PHOSPHATE")
 2116 DH
 89735 DEHYDROGENASE#
 8864 (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#)
 474 G6PDH
 L6 8943 ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH

FILE 'HCAPLUS'

223 ZWF
 591 G6P
 67 GLC6P
 367489 GLUCOSE
 3421163 6
 502118 PHOSPHATE
 26435 GLUCOSE-6-PHOSPHATE
 (GLUCOSE (W) 6 (W) PHOSPHATE)
 7244 DH
 151910 DEHYDROGENASE#
 16503 (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#)
 827 G6PDH
 L7 16614 ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH

FILE 'NTIS'

0 ZWF
 0 G6P
 0 GLC6P
 2860 GLUCOSE
 129372 6
 6331 PHOSPHATE
 156 GLUCOSE-6-PHOSPHATE
 (GLUCOSE (W) 6 (W) PHOSPHATE)
 362 DH
 1072 DEHYDROGENASE#
 119 (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#)
 2 G6PDH
 L8 119 ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH

FILE 'ESBIOBASE'

45 ZWF
 147 G6P
 40 GLC6P
 58239 GLUCOSE
 433882 6
 39790 PHOSPHATE
 2453 GLUCOSE-6-PHOSPHATE
 (GLUCOSE (W) 6 (W) PHOSPHATE)
 1100 DH
 24702 DEHYDROGENASE#
 1382 (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#)
 249 G6PDH
 L9 1437 ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH

FILE 'BIOTECHNO'

59 ZWF
 124 G6P
 37 GLC6P
 43289 GLUCOSE
 285524 6
 51707 PHOSPHATE
 3288 GLUCOSE-6-PHOSPHATE
 (GLUCOSE (W) 6 (W) PHOSPHATE)
 849 DH
 29338 DEHYDROGENASE#
 1800 (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#)
 148 G6PDH
 L10 1835 ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH

FILE 'WPIDS'

94 ZWF
 12 G6P
 0 GLC6P
 30168 GLUCOSE
 2664426 6
 86069 PHOSPHATE
 581 GLUCOSE-6-PHOSPHATE
 (GLUCOSE (W) 6 (W) PHOSPHATE)
 1091 DH
 4645 DEHYDROGENASE#
 392 (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#)
 45 G6PDH
 L11 423 ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGENASE#) OR G6PDH

TOTAL FOR ALL FILES

L12 58873 ZWF OR (G6P OR GLC6P OR GLUCOSE-6-PHOSPHATE) (W) (DH OR DEHYDROGEN ASE#) OR G6PDH

=> s l12 and corynebact?

FILE 'MEDLINE'

8917 CORYNEBACT?

L13 9 L1 AND CORYNEBACT?

FILE 'SCISEARCH'

5910 CORYNEBACT?

L14 11 L2 AND CORYNEBACT?

FILE 'LIFESCI'

3876 CORYNEBACT?

L15 6 L3 AND CORYNEBACT?

FILE 'BIOTECHDS'

2723 CORYNEBACT?

L16 91 L4 AND CORYNEBACT?

FILE 'BIOSIS'

11070 CORYNEBACT?

L17 16 L5 AND CORYNEBACT?

FILE 'EMBASE'

9152 CORYNEBACT?

L18 9 L6 AND CORYNEBACT?

FILE 'HCAPLUS'

11166 CORYNEBACT?

L19 123 L7 AND CORYNEBACT?

FILE 'NTIS'

182 CORYNEBACT?

L20 0 L8 AND CORYNEBACT?

FILE 'ESBIOBASE'

1313 CORYNEBACT?

L21 7 L9 AND CORYNEBACT?

FILE 'BIOTECHNO'

2403 CORYNEBACT?

L22 7 L10 AND CORYNEBACT?

FILE 'WPIDS'

2776 CORYNEBACT?

L23 87 L11 AND CORYNEBACT?

TOTAL FOR ALL FILES

L24 366 L12 AND CORYNEBACT?

=> s (amino acid or lysine or threonine or tryptophan or lys or thr or trp) (5a) (biosynthes? or synthes? or prepar?)

FILE 'MEDLINE'

557560 AMINO

1263833 ACID

415553 AMINO ACID

(AMINO(W)ACID)

40501 LYSINE

34164 THREONINE

33559 TRYPTOPHAN

16532 LYS

11806 THR

12487 TRP
538678 BIOSYNTHES?
455555 SYNTHES?
426653 PREPAR?
L25 6933 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'SCISEARCH'

344283 AMINO
985561 ACID
183571 AMINO ACID
(AMINO(W)ACID)
27088 LYSINE
17154 THREONINE
24555 TRYPTOPHAN
14201 LYS
15221 THR
10777 TRP
84759 BIOSYNTHES?
793775 SYNTHES?
509161 PREPAR?
L26 8064 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'LIFESCI'

154684 "AMINO"
273037 "ACID"
107308 AMINO ACID
("AMINO" (W) "ACID")
10011 LYSINE
7611 THREONINE
7615 TRYPTOPHAN
7188 LYS
5127 THR
5057 TRP
51120 BIOSYNTHES?
132158 SYNTHES?
97187 PREPAR?
L27 2979 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'BIOTECHDS'

54152 AMINO
113638 ACID
38397 AMINO ACID
(AMINO(W)ACID)
3483 LYSINE
1911 THREONINE
2388 TRYPTOPHAN
2978 LYS
2440 THR
2276 TRP
8859 BIOSYNTHES?
28843 SYNTHES?
75369 PREPAR?
L28 2059 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'BIOSIS'

487739 AMINO
1158486 ACID
282443 AMINO ACID
(AMINO(W)ACID)
46598 LYSINE

24157 THREONINE
 37503 TRYPTOPHAN
 17098 LYS
 12160 THR
 12908 TRP
 96059 BIOSYNTHES?
 611201 SYNTHES?
 434506 PREPAR?
 L29 11578 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
 OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'EMBASE'

376525 "AMINO"
 1225144 "ACID"
 255669 AMINO ACID
 ("AMINO" (W) "ACID")
 32470 LYSINE
 19573 THREONINE
 27347 TRYPTOPHAN
 13808 LYS
 10228 THR
 9568 TRP
 58095 BIOSYNTHES?
 555257 SYNTHES?
 357403 PREPAR?
 L30 8333 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
 OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'HCAPLUS'

980266 AMINO
 3826002 ACID
 481125 AMINO ACID
 (AMINO(W)ACID)
 94100 LYSINE
 50122 THREONINE
 67468 TRYPTOPHAN
 26092 LYS
 17070 THR
 18816 TRP
 123459 BIOSYNTHES?
 1371706 SYNTHES?
 1472225 PREPAR?
 110040 PREP
 1865804 PREPD
 96473 PREPG
 2476975 PREPN
 4228697 PREPAR?
 (PREPAR? OR PREP OR PREPD OR PREPG OR PREPN)
 L31 36974 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
 OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'NTIS'

6831 AMINO
 43272 ACID
 2396 AMINO ACID
 (AMINO(W)ACID)
 365 LYSINE
 151 THREONINE
 407 TRYPTOPHAN
 127 LYS
 154 THR
 153 TRP
 3624 BIOSYNTHES?
 41589 SYNTHES?

105993 PREPAR?
L32 194 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'ESBIOBASE'

152913 AMINO
283483 ACID
85896 AMINO ACID
(AMINO(W)ACID)
9692 LYSINE
9039 THREONINE
7213 TRYPTOPHAN
7611 LYS
6326 THR
5427 TRP
26571 BIOSYNTHES?
165670 SYNTHES?
85041 PREPAR?
L33 2555 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'BIOTECHNO'

204625 AMINO
349810 ACID
154660 AMINO ACID
(AMINO(W)ACID)
13846 LYSINE
11609 THREONINE
7974 TRYPTOPHAN
9434 LYS
7178 THR
5672 TRP
29435 BIOSYNTHES?
170699 SYNTHES?
86115 PREPAR?
L34 3495 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

FILE 'WPIDS'

216369 AMINO
847927 ACID
57444 AMINO ACID
(AMINO(W)ACID)
8841 LYSINE
3634 THREONINE
3308 TRYPTOPHAN
7617 LYS
7184 THR
4476 TRP
4348 BIOSYNTHES?
115940 SYNTHES?
691523 PREPAR?
343600 PREPD
9351 PREPG
289152 PREPN
939515 PREPAR?
(PREPAR? OR PREPD OR PREPG OR PREPN)
L35 4251 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

TOTAL FOR ALL FILES

L36 87415 (AMINO ACID OR LYSINE OR THREONINE OR TRYPTOPHAN OR LYS OR THR
OR TRP) (5A) (BIOSYNTHES? OR SYNTHES? OR PREPAR?)

=> s 112 and 136
FILE 'MEDLINE'
L37 9 L1 AND L25

FILE 'SCISEARCH'
L38 9 L2 AND L26

FILE 'LIFESCI'
L39 4 L3 AND L27

FILE 'BIOTECHDS'
L40 62 L4 AND L28

FILE 'BIOSIS'
L41 19 L5 AND L29

FILE 'EMBASE'
L42 11 L6 AND L30

FILE 'HCAPLUS'
L43 132 L7 AND L31

FILE 'NTIS'
L44 0 L8 AND L32

FILE 'ESBIOBASE'
L45 4 L9 AND L33

FILE 'BIOTECHNO'
L46 8 L10 AND L34

FILE 'WPIDS'
L47 54 L11 AND L35

TOTAL FOR ALL FILES
L48 312 L12 AND L36

=> s (124 or 148) not 2001-2004/py
FILE 'MEDLINE'
1838969 2001-2004/PY
L49 10 (L13 OR L37) NOT 2001-2004/PY

FILE 'SCISEARCH'
3404745 2001-2004/PY
L50 7 (L14 OR L38) NOT 2001-2004/PY

FILE 'LIFESCI'
328976 2001-2004/PY
L51 4 (L15 OR L39) NOT 2001-2004/PY

FILE 'BIOTECHDS'
71824 2001-2004/PY
L52 0 (L16 OR L40) NOT 2001-2004/PY

FILE 'BIOSIS'
1797825 2001-2004/PY
L53 27 (L17 OR L41) NOT 2001-2004/PY

FILE 'EMBASE'
1563752 2001-2004/PY
L54 12 (L18 OR L42) NOT 2001-2004/PY

FILE 'HCAPLUS'
3446818 2001-2004/PY

L55 41 (L19 OR L43) NOT 2001-2004/PY

FILE 'NTIS'

49156 2001-2004/PY

L56 0 (L20 OR L44) NOT 2001-2004/PY

FILE 'ESBIOBASE'

976065 2001-2004/PY

L57 4 (L21 OR L45) NOT 2001-2004/PY

FILE 'BIOTECHNO'

368875 2001-2004/PY

L58 6 (L22 OR L46) NOT 2001-2004/PY

FILE 'WPIDS'

3239871 2001-2004/PY

L59 0 (L23 OR L47) NOT 2001-2004/PY

TOTAL FOR ALL FILES

L60 111 (L24 OR L48) NOT 2001-2004/PY

=> dup rem l60

PROCESSING COMPLETED FOR L60

L61 64 DUP REM L60 (47 DUPLICATES REMOVED)

=> d tot

L61 ANSWER 1 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Investigation of the pentose phosphate pathway regulation of
Corynebacterium glutamicum

SO Berichte des Forschungszentrums Juelich (2000), Juel-3743, i-vii, 1-97
CODEN: FJBEE5; ISSN: 0366-0885

AU Mortiz, Bernd Stefan

AN 2000:543208 HCAPLUS

DN 133:174441

L61 ANSWER 2 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Functional analysis of gapped microbial genomes: amino acid metabolism of
Thiobacillus ferrooxidans

SO Proceedings of the National Academy of Sciences of the United States of
America (2000), 97(7), 3509-3514
CODEN: PNASA6; ISSN: 0027-8424

AU Selkov, Evgeni; Overbeek, Ross; Kogan, Yakov; Chu, Lien; Vonstein,
Veronika; Holmes, David; Silver, Simon; Haselkorn, Robert; Fonstein,
Michael

AN 2000:231967 HCAPLUS

DN 133:160415

L61 ANSWER 3 OF 64 MEDLINE on STN DUPLICATE 1

TI Kinetic properties of the glucose-6-phosphate and 6-phosphogluconate
dehydrogenases from **Corynebacterium** glutamicum and their
application for predicting pentose phosphate pathway flux in vivo.

SO European journal of biochemistry / FEBS, (2000 Jun) 267 (12) 3442-52.
Journal code: 0107600. ISSN: 0014-2956.

AU Moritz B; Striegel K; De Graaf A A; Sahm H

AN 2000395039 MEDLINE

L61 ANSWER 4 OF 64 MEDLINE on STN DUPLICATE 2

TI Pathway analysis and metabolic engineering in **Corynebacterium**
glutamicum.

SO Biological chemistry, (2000 Sep-Oct) 381 (9-10) 899-910. Ref: 65
Journal code: 9700112. ISSN: 1431-6730.

AU Sahm H; Eggeling L; de Graaf A A

AN 2001354312 MEDLINE

L61 ANSWER 5 OF 64 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 TI Pathway analysis and metabolic engineering in **Corynebacterium**
 glutamicum.
 SO Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische
 Wetenschappen Universiteit Gent, (2000) Vol. 65, No. 3A, pp. 221-229.
 print.
 AU Sahm, H. [Reprint author]; Eggeling, L. [Reprint author]; de Graaf, A. A.
 [Reprint author]
 AN 2001:96331 BIOSIS

L61 ANSWER 6 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Enzymic synthesis of [7-14C, 7-3H]- and [1-13C]sedoheptulose 7-phosphate
 and [1-13C]ido-heptulose 7-phosphate
 SO Journal of Molecular Catalysis B: Enzymatic (1999), 6(3), 369-377
 CODEN: JMCEF8; ISSN: 1381-1177
 AU Lee, Sungsook; Kirschning, Andreas; Muller, Michael; Way, Chris; Floss,
 Heinz G.
 AN 1999:77999 HCAPLUS
 DN 130:252580

L61 ANSWER 7 OF 64 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 TI Ammonium metabolism stimulation of glucose-6P dehydrogenase and
 phosphoenolpyruvate carboxylase in young barley roots.
 SO Journal of Plant Physiology, (Aug., 1998) Vol. 153, No. 1-2, pp. 61-66.
 print.
 CODEN: JPPHEY. ISSN: 0176-1617.
 AU Esposito, Sergio; Carillo, Petronia; Carfagna, Simona
 AN 1998:486359 BIOSIS

L61 ANSWER 8 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Determination of the carbon flux in the central metabolism of
Corynebacterium glutamicum by 13C-isotope analysis
 SO Berichte des Forschungszentrums Juelich (1997), Juel-3459, 1-111 pp.
 CODEN: FJBEE5; ISSN: 0366-0885
 AU Marx, Achim
 AN 1998:184754 HCAPLUS
 DN 128:292608

L61 ANSWER 9 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Cloning of gene **zwf** encoding **glucose-6-**
phosphate dehydrogenase from coryneform bacteria
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 IN Hatakeyama, Kazuhisa; Kuwabara, Koichiro; Kobayashi, Miki; Yukawa, Hideaki
 AN 1997:586975 HCAPLUS
 DN 127:217036

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 09224661 | A2 | 19970902 | JP 1996-36345 | 19960223 |

L61 ANSWER 10 OF 64 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
 on STN DUPLICATE 3
 TI Metabolism of sulfur amino acids in *Saccharomyces cerevisiae*.
 SO Microbiology and Molecular Biology Reviews, (1997) 61/4 (503-532).
 Refs: 271
 ISSN: 1092-2172 CODEN: MMBRF7
 AU Thomas D.; Surdin-Kerjan Y.
 AN 1998002212 EMBASE

L61 ANSWER 11 OF 64 MEDLINE on STN DUPLICATE 4
 TI Presence of F420-dependent **glucose-6-phosphate**
dehydrogenase in *Mycobacterium* and *Nocardia* species, but absence
 from *Streptomyces* and **Corynebacterium** species and methanogenic

Archaea.
SO FEMS microbiology letters, (1997 Jan 1) 146 (1) 129-34.
Journal code: 7705721. ISSN: 0378-1097.
AU Purwantini E; Gillis T P; Daniels L
AN 97151735 MEDLINE

L61 ANSWER 12 OF 64 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN DUPLICATE 5
TI Involvement of the oxidative pentose phosphate pathway in thiamine
biosynthesis in Salmonella typhimurium.
SO Journal of Bacteriology, (1996) 178/5 (1476-1479).
ISSN: 0021-9193 CODEN: JOBAAY
AU Enos-Berlage J.L.; Downs D.M.
AN 96076613 EMBASE

L61 ANSWER 13 OF 64 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN
TI An important role for pentose cycle in the synthesis of citrulline and
proline from glutamine in porcine enterocytes.
SO Archives of Biochemistry and Biophysics, (1996) 336/2 (224-230).
Refs: 39
ISSN: 0003-9861 CODEN: ABBIA4
AU Wu G.
AN 97005470 EMBASE

L61 ANSWER 14 OF 64 MEDLINE on STN DUPLICATE 6
TI Chemical characterization of a protein-4-hydroxy-2-nonenal cross-link:
immunochemical detection in mitochondria exposed to oxidative stress.
SO Archives of biochemistry and biophysics, (1996 Apr 1) 328 (1) 158-64.
Journal code: 0372430. ISSN: 0003-9861.
AU Cohn J A; Tsai L; Friguet B; Szveda L I
AN 96195776 MEDLINE

L61 ANSWER 15 OF 64 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 7
TI REGULATION OF CARBOHYDRATE-METABOLISM IN FISH .25. METABOLIC RESPONSE TO
ACCLIMATION TEMPERATURE IN CARP
SO FISHERIES SCIENCE, (JUN 1995) Vol. 61, No. 3, pp. 512-516.
ISSN: 0919-9268.
AU SHIKATA T (Reprint); IWANAGA S; SHIMENO S
AN 95:514297 SCISEARCH

L61 ANSWER 16 OF 64 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI The enzymology of dicarboxylic acid formation by **Corynebacterium**
sp. strain 7E1C grown on n-alkanes.
SO Journal of General Microbiology, (1993) Vol. 139, No. 6, pp. 1337-1344.
CODEN: JGMIAN. ISSN: 0022-1287.
AU Broadway, Neil M.; Dickinson, F. Mark; Ratledge, Colin [Reprint author]
AN 1993:393393 BIOSIS

L61 ANSWER 17 OF 64 MEDLINE on STN DUPLICATE 8
TI **Lysine biosynthesis** in selected pathogenic fungi:
characterization of lysine auxotrophs and the cloned LYS1 gene of Candida
albicans.
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L61 ANSWER 8 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN
AB All C fluxes of the central metabolism of *C. glutamicum* were quantified and
the role and coordination of single metabolic pathways were studied under
different metabolic situations. A method based on ¹³C-data was

established to quantify all metabolite fluxes of the central metabolism. Strong sensitivities were indicated between metabolic fluxes and ^{13}C data, thus allowing the determination of metabolite flux. When the ^{13}C -content of the position oxalacetate C-4 was varied by the factor 2 it could be shown if anaplerotic production of C4-bodies was via the carboxylation of C3-bodies or via the glyoxalate cycle. A hyperbolic relationship was shown for the bi-directional turnover of transketolase and the ^{13}C -content of the position pentose-5-phosphate C-1 and for the bi-directional metabolite flux between C3-bodies of glycolysis and C4-bodies of the tricarboxylate (TCA) cycle and ^{13}C -enrichment of the position oxalacetate C-2. The NADPH balance showed that, depending on the conditions, more NADPH was produced than necessary for the synthesis of biomass and products. The NADPH excess was 16-67% in relation to the glucose uptake rate. Depending on the metabolic situation, the C4-body-decarboxylation was 10-132% and opposed to the carboxylation of C3-bodies for the anaplerotic supply of the TCA cycle. C4-body-decarboxylation and NADPH-excess as adaptations to high production of Lys were minimal, with a yield coefficient of 0.32 molLys/molglucose-1. The contribution of malate enzyme to a total NADPH production of 211% was small. The pentose phosphate pathway (PPP) and the TCA cycle produced 3/4 and 1/4, resp., of the total NADPH. Overexpression of glutamate dehydrogenase in a mutant of strain MH20-22B resulted in low TCA cycle flux and a high metabolite flux through the oxidative PPP. A high TCA cycle flux was detected during glutamate production using strain LE4. The PPP flux was low in this strain. In a mutant of strain MH20-22B producing Lys and using NADH for **synthesis** of glutamate, TCA cycle flux was 79% and that of PPP was 26%. The low PPP was due to low NADPH consumption and high NADPH production from isocitrate dehydrogenase of the TCA cycle. A strain ATCC 13032 isocitrate dehydrogenase mutant with a blocked TCA cycle showed a PPP flux of 62%. This mutant showed a glyoxalate cycle active in vivo when metabolizing glucose. This metabolite flux was 53%. A flux of 16% produced anaplerotically C4-bodies. At a flux of 37% the glyoxalate cycle released CO_2 by C4-body decarboxylation and pyruvate dehydrogenase.

L61 ANSWER 9 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN

AB Gene **zwf** encoding a novel **glucose-6-phosphate dehydrogenase** is isolated from *Brevibacterium flavum* strain MJ-233. The gene encoding the 484-amino-acid enzyme.

L61 ANSWER 16 OF 64 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

AB Cultures of the Gram-positive bacterium *Corynebacterium* sp. strain 7E1C contained up to 300 mg dodecanedioic acid l-1 after growth on dodecane. Small amounts of tetradecanedioic acid (17 to 45 mg l-1) were produced during growth on tetradecane or methyl tetradecanoate. No dicarboxylic acids were detected after growth on hexadecane, hexadecanoic acid or 16-hydroxyhexadecanoic acid. Studies on the rates of degradation of exogenous dicarboxylic acids showed that this is not a significant factor influencing the accumulation of dodecanedioic and tetradecanedioic acids. The activities and substrate specificities of a number of enzyme activities involved in dicarboxylic acid metabolism were investigated. The specificities of the long-chain acyl-CoA synthetase and thioesterase, alcohol dehydrogenases and beta-oxidation are consistent with the accumulation of dodecanedioic acid from dodecane and the lack of production of hexadecanedioic acid from hexadecane. The omega-hydroxy fatty acid may occupy a pivotal position in determining whether significant production of dicarboxylic acid occurs with this organism.

L61 ANSWER 17 OF 64 MEDLINE on STN DUPLICATE 8

AB The alpha-amino adipate pathway for the **biosynthesis** of **lysine** is present only in fungi and euglena. Until now, this unique metabolic pathway has never been investigated in the opportunistic fungal pathogens *Candida albicans*, *Cryptococcus neoformans*, and *Aspergillus fumigatus*. Five of the eight enzymes (homocitrate synthase,

homoisocitrate dehydrogenase, alpha-aminoadipate reductase, saccharopine reductase, and saccharopine dehydrogenase) of the alpha-aminoadipate pathway and **glucose-6-phosphate dehydrogenase**, a glycolytic enzyme used as a control, were demonstrated in wild-type cells of these organisms. All enzymes were present in *Saccharomyces cerevisiae* and the pathogenic organisms except *C. neoformans* 32608 serotype C, which exhibited no saccharopine reductase activity. The levels of enzyme activity varied considerably from strain to strain. Variation among organisms was also observed for the control enzyme. Among the pathogens, *C. albicans* exhibited much higher homocitrate synthase, homoisocitrate dehydrogenase, and alpha-aminoadipate reductase activities. Seven lysine auxotrophs of *C. albicans* and one of *Candida tropicalis* were characterized biochemically to determine the biochemical blocks and gene-enzyme relationships. Growth responses to alpha-aminoadipate- and lysine-supplemented media, accumulation of alpha-aminoadipate semialdehyde, and the lack of enzyme activity revealed that five of the mutants (WA104, WA153, WC7-1-3, WD1-31-2, and A5155) were blocked at the alpha-aminoadipate reductase step, two (STN57 and WD1-3-6) were blocked at the saccharopine dehydrogenase step, and the *C. tropicalis* mutant (X-16) was blocked at the saccharopine reductase step. The cloned *LYS1* gene of *C. albicans* in the recombinant plasmid YpB1078 complemented saccharopine dehydrogenase (*lys1*) mutants of *S. cerevisiae* and *C. albicans*. The *Lys1+* transformed strains exhibited significant saccharopine dehydrogenase activity in comparison with untransformed mutants. The cloned *LYS1* gene has been localized on a 1.8-kb *HindIII* DNA insert of the recombinant plasmid YpB1041RG1. These results established the gene-enzyme relationship in the second half of the alpha-aminoadipate pathway. The presence of this unique pathway in the pathogenic fungi could be useful for their rapid detection and control.

L61 ANSWER 26 OF 64 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 10

AB NADP-Specific **G6P dehydrogenase** was partially purified from *Brevibacterium flavum*. Its activity, with an optimum pH of 7.5, was stabilized by KCl or Mg²⁺ and inhibited by diamide, a sulfhydryl reagent. It was also inhibited by oxaloacetate, FBP, PRPP, acetyl-CoA, Ru5P, xylulose 5-phosphate and NADPH. Among them, oxaloacetate showed the strongest inhibition. The concentration of oxaloacetate giving 50% inhibition was 0.09 mM. The inhibitions by oxaloacetate, FBP, PRPP, and NADPH were non-competitive, mixed, and competitive for both the substrates, respectively. Oxaloacetate in combination with FBP, PRPP, or Ru5P inhibited the activity cumulatively. The sensitivities to the oxaloacetate, FBP, and PRPP inhibitions were lost on ammonium sulfate treatment, whereas that to NADPH inhibition was not affected at all. The inhibition by oxaloacetate was specific to glutamate-producing bacteria belonging to the genera, *Brevibacterium* and *Corynebacterium*, in contrast to those by FBP and PRPP, which were found in almost all bacteria tested. **G6P dehydrogenase** in *B. flavum* was induced by glucose when it was cultured on acetate, succinate, or glutamate.

L61 ANSWER 40 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN

AB Purified **glucose 6-phosphate dehydrogenase** from *Zymomonas mobilis* was examined with respect to inhibition by phosphoenolpyruvate, ADP, and ATP. Its mol. weight was 260,000 and the kinetics of substrate conversion indicated a random bi bi mechanism. This enzyme and the dehydrogenases from *Z. anaerobia*, *Azotobacter chroococcum*, *A. vinelandii* and *Corynebacterium autotrophicum* were allosterically inhibited by phosphoenolpyruvate, whereas those from several coryneform bacteria and from *Escherichia coli* or *Pseudomonas fluorescens* were not.

L61 ANSWER 51 OF 64 MEDLINE on STN DUPLICATE 17

L61 ANSWER 53 OF 64 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

L61 ANSWER 55 OF 64 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

L61 ANSWER 56 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN

AB From the standpoint of enzymic action, the mechanism of L-glutamic acid formation by mixed cultures of *Escherichia coli* 3691 E and ***Corynebacterium*** species 1633 A was studied. In pure cultures, several kinds of enzymes from glycolytic pathways and the tricarboxylic acid cycle were highly active in *E. coli* cells and hardly observed in ***Corynebacterium*** cells. But urease activity of *E. coli* cells was markedly strong compared with that of ***Corynebacterium*** cells. In mixed culture cells, the oxidation activity of acetate and the level of isocitrate dehydrogenase were markedly higher than those in pure culture cells. The presence of **glucose-6-phosphate dehydrogenase** and phosphoglucose isomerase suggests that glycolysis in this mixed culture follows both the Embden-Meyerhof pathway and the hexose monophosphate pathway.

=> s poxb or pox(w)b or pyruvate oxidase#

FILE 'MEDLINE'

19 POXB

1656 POX

577812 B

1 POX(W)B

24432 PYRUVATE

65649 OXIDASE#

265 PYRUVATE OXIDASE#

(PYRUVATE(W)OXIDASE#)

L62 269 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'SCISEARCH'

19 POXB

1600 POX

1137330 B

1 POX(W)B

19428 PYRUVATE

62277 OXIDASE#

232 PYRUVATE OXIDASE#

(PYRUVATE(W)OXIDASE#)

L63 241 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'LIFESCI'

13 POXB

744 POX

192842 B

1 POX(W)B

6026 "PYRUVATE"

16492 OXIDASE#

81 PYRUVATE OXIDASE#

("PYRUVATE"(W)OXIDASE#)

L64 86 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'BIOTECHDS'

126 POXB

1268 POX

50141 B

1 POX(W)B

1952 PYRUVATE

6051 OXIDASE#

207 PYRUVATE OXIDASE#

(PYRUVATE(W)OXIDASE#)
L65 217 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'BIOSIS'

19 POXB
3529 POX
674582 B
10 POX(W)B
35927 PYRUVATE
83029 OXIDASE#
273 PYRUVATE OXIDASE#
(PYRUVATE(W)OXIDASE#)

L66 284 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'EMBASE'

16 POXB
983 POX
636555 B
2 POX(W)B
19992 "PYRUVATE"
57653 OXIDASE#
173 PYRUVATE OXIDASE#
("PYRUVATE"(W)OXIDASE#)

L67 180 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'HCAPLUS'

217 POXB
1778 POX
1430652 B
2 POX(W)B
48038 PYRUVATE
110029 OXIDASE#
810 PYRUVATE OXIDASE#
(PYRUVATE(W)OXIDASE#)

L68 840 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'NTIS'

0 POXB
120 POX
66418 B
0 POX(W)B
304 PYRUVATE
730 OXIDASE#
1 PYRUVATE OXIDASE#
(PYRUVATE(W)OXIDASE#)

L69 1 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'ESBIOBASE'

11 POXB
447 POX
289652 B
1 POX(W)B
6080 PYRUVATE
17908 OXIDASE#
59 PYRUVATE OXIDASE#
(PYRUVATE(W)OXIDASE#)

L70 65 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'BIOTECHNO'

14 POXB
378 POX
228519 B
0 POX(W)B
6527 PYRUVATE

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16788 OXIDASE#
107 PYRUVATE OXIDASE#
(PYRUVATE(W) OXIDASE#)
L71 112 POXB OR POX(W)B OR PYRUVATE OXIDASE#

FILE 'WPIDS'
144 POXB
731 POX
1124537 B
2 POX(W)B
1864 PYRUVATE
6144 OXIDASE#
207 PYRUVATE OXIDASE#
(PYRUVATE(W) OXIDASE#)
L72 218 POXB OR POX(W)B OR PYRUVATE OXIDASE#

TOTAL FOR ALL FILES
L73 2513 POXB OR POX(W) B OR PYRUVATE OXIDASE#

=> s l73 and corynebact?
FILE 'MEDLINE'
8917 CORYNEBACT?
L74 1 L62 AND CORYNEBACT?

FILE 'SCISEARCH'
5910 CORYNEBACT?
L75 1 L63 AND CORYNEBACT?

FILE 'LIFESCI'
3876 CORYNEBACT?
L76 1 L64 AND CORYNEBACT?

FILE 'BIOTECHDS'
2723 CORYNEBACT?
L77 97 L65 AND CORYNEBACT?

FILE 'BIOSIS'
11070 CORYNEBACT?
L78 1 L66 AND CORYNEBACT?

FILE 'EMBASE'
9152 CORYNEBACT?
L79 2 L67 AND CORYNEBACT?

FILE 'HCAPLUS'
11166 CORYNEBACT?
L80 123 L68 AND CORYNEBACT?

FILE 'NTIS'
182 CORYNEBACT?
L81 0 L69 AND CORYNEBACT?

FILE 'ESBIOBASE'
1313 CORYNEBACT?
L82 1 L70 AND CORYNEBACT?

FILE 'BIOTECHNO'
2403 CORYNEBACT?
L83 1 L71 AND CORYNEBACT?

FILE 'WPIDS'
2776 CORYNEBACT?
L84 101 L72 AND CORYNEBACT?

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TOTAL FOR ALL FILES
L85 329 L73 AND CORYNEBACT?

=> s 173 and 136
FILE 'MEDLINE'
L86 0 L62 AND L25

FILE 'SCISEARCH'
L87 1 L63 AND L26

FILE 'LIFESCI'
L88 0 L64 AND L27

FILE 'BIOTECHDS'
L89 87 L65 AND L28

FILE 'BIOSIS'
L90 1 L66 AND L29

FILE 'EMBASE'
L91 1 L67 AND L30

FILE 'HCAPLUS'
L92 159 L68 AND L31

FILE 'NTIS'
L93 0 L69 AND L32

FILE 'ESBIOBASE'
L94 0 L70 AND L33

FILE 'BIOTECHNO'
L95 1 L71 AND L34

FILE 'WPIDS'
L96 87 L72 AND L35

TOTAL FOR ALL FILES
L97 337 L73 AND L36

=> s (185 or 197) not 2001-2004/py
FILE 'MEDLINE'
1838969 2001-2004/PY
L98 0 (L74 OR L86) NOT 2001-2004/PY

FILE 'SCISEARCH'
3404745 2001-2004/PY
L99 1 (L75 OR L87) NOT 2001-2004/PY

FILE 'LIFESCI'
328976 2001-2004/PY
L100 0 (L76 OR L88) NOT 2001-2004/PY

FILE 'BIOTECHDS'
71824 2001-2004/PY
L101 1 (L77 OR L89) NOT 2001-2004/PY

FILE 'BIOSIS'
1797825 2001-2004/PY
L102 1 (L78 OR L90) NOT 2001-2004/PY

FILE 'EMBASE'
1563752 2001-2004/PY
L103 0 (L79 OR L91) NOT 2001-2004/PY

FILE 'HCAPLUS'
3446818 2001-2004/PY
L104 1 (L80 OR L92) NOT 2001-2004/PY

FILE 'NTIS'
49156 2001-2004/PY
L105 0 (L81 OR L93) NOT 2001-2004/PY

FILE 'ESBIOBASE'
976065 2001-2004/PY
L106 0 (L82 OR L94) NOT 2001-2004/PY

FILE 'BIOTECHNO'
368875 2001-2004/PY
L107 0 (L83 OR L95) NOT 2001-2004/PY

FILE 'WPIDS'
3239871 2001-2004/PY
L108 0 (L84 OR L96) NOT 2001-2004/PY

TOTAL FOR ALL FILES
L109 4 (L85 OR L97) NOT 2001-2004/PY

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L110 4 DUP REM L109 (0 DUPLICATES REMOVED)

=> d tot

L110 ANSWER 1 OF 4 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
TI A study on growth characteristics and nutrient consumption of
Lactobacillus plantarum in A-stat culture
SO ANTONIE VAN LEEUWENHOEK INTERNATIONAL JOURNAL OF GENERAL AND MOLECULAR
MICROBIOLOGY, (MAY 1999) Vol. 75, No. 4, pp. 309-320.
Publisher: KLUWER ACADEMIC PUBL, SPUIBOULEVARD 50, PO BOX 17, 3300 AA
DORDRECHT, NETHERLANDS.
ISSN: 0003-6072.
AU Kask S; Laht T M; Pall T; Paalme T (Reprint)
AN 1999:678871 SCISEARCH

L110 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI INTERACTION OF QUINONES WITH ACETOLACTATE SYNTHASE.
SO FASEB Journal, (1988) Vol. 2, No. 5, pp. ABSTRACT 4068.
Meeting Info.: 72ND ANNUAL MEETING OF THE FEDERATION OF AMERICAN SOCIETIES
FOR EXPERIMENTAL BIOLOGY, LAS VEGAS, NEVADA, USA, MAY 1-5, 1988. FASEB
(FED AM SOC EXP BIOL) J.
CODEN: FAJOEC. ISSN: 0892-6638.
AU CISKANIK L M [Reprint author]; VAN DYK D E; SCHLOSS J V
AN 1988:276669 BIOSIS

L110 ANSWER 3 OF 4 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI A glutamine-synthetase-glutamate-synthase system of
Corynebacterium glutamicum and Brevibacterium flavum and its
application;
glutamic acid production (conference abstract)
SO Eur.Congr.Biotechnol.; (1987) Vol.2, 23
AU Tochikura T
AN 1989-07060 BIOTECHDS

L110 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Phosphoketolase system of carbohydrate cleavage in saprophytic
mycobacteria
SO Doklady Akademii Nauk SSSR (1983), 272(2), 490-2 [Microbiol.]

CODEN: DANKAS; ISSN: 0002-3264
AU Golovlev, E. L.; Eroshina, N. V.; Baryshnikova, L. M.
AN 1984:3288 HCAPLUS
DN 100:3288

=> d ab tot

L110 ANSWER 1 OF 4 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN

AB Lactobacillus plantarum was grown in complex media containing glucose and yeast extract. The maximum growth yield based on yeast extract consumption was 0.5 g dwt g(-1). Growth yield Y-ATP 15-17 g dwt mol ATP(-1) was almost constant in the glucose limited A-stat experiment whereas in the yeast extract limited culture it increased with dilution rate. The maximum specific growth rate observed, 0.5 h(-1), was similar for both A-stat and batch cultures. Specific oxygen consumption, Q(O2), reached the value of 1.8 mmol O-2 h(-1) g dwt(-1). It was shown that Val, Ile, Leu, Tyr and Phe, were consumed mainly as free amino acids, while Asp, Pro, Lys and Arg were derived from peptides. Significantly more Asp, Ser, Glu, Val, Ile, Leu and Phe were consumed than needed to build up cell protein whereas some Pro, Gly, Ala and **Lys** was **synthesized**. A network of metabolic reactions in L. plantarum was proposed on the basis of the experimental data.

L110 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

L110 ANSWER 3 OF 4 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

AB This paper dealt with the function of the glutamine-synthetase (GS, EC-6.3.2.3)-glutamate-synthase (GOGAT) pathway in ammonia assimilation and glutamate synthesis by glutamate producing bacteria. Characteristics were described of a method of glutamine production and its derivatives by use of GS from the glutamate producers and sugar fermentation of Saccharomyces cerevisiae as an ATP-regenerating system. The development of a rapid and sensitive enzymatic assay method for ammonia was reported, by using GS with pyruvate-kinase (EC-2.7.1.40), lactate-dehydrogenase (LDH, EC-1.1.1.27) and NADH. The time required for the determination of 25 nmol of ammonia was 5 min with 1 unit of GS. The method can be modified for spectroscopy in the visible region with increase in the sensitivity by substituting **pyruvate-oxidase** (EC-1.2.3.3), peroxidase (EC-1.11.1.7) and appropriate chromogens for LDH and NADH. The method was applicable to the continuous detection of some diagnostically important enzymes involved in ammonia formation. (3 ref)

L110 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

AB The carbohydrate-metabolizing enzymes were determined in 7 species of saprophytic bacteria: Arthrobacter globiformis, **Corynebacterium ammoniagenes**, **Corynebacterium flavum**, Curtobacterium michiganense, Rhodococcus corallinus, R. globerulus, and R. minimus. All species contained high activity of fructose 6-phosphate phosphoketolase, xylose 5-phosphate phosphoketolase, and **pyruvate oxidase**, indicating that phosphates play an important role in the catabolism of carbohydrates in these bacteria. Other enzymes, including those of glycolysis and the phosphate pentose pathway, were also reported.

=> fil .becpat

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| FULL ESTIMATED COST | 211.86 | 212.07 |
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| CA SUBSCRIBER PRICE | -3.47 | -3.47 |

FILES 'BIOTECHDS, HCAPLUS, WPIDS' ENTERED AT 15:39:11 ON 07 JUN 2004
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3 FILES IN THE FILE LIST

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25055 WO/PC
24038 PRY<=2000
(PRY<=2000)

L111 19 (L16 OR L40 OR L77 OR L89) AND WO/PC AND PRY<=2000

FILE 'HCAPLUS'

169537 WO/PC
384463 PRY<=2000

L112 83 (L19 OR L43 OR L80 OR L92) AND WO/PC AND PRY<=2000

FILE 'WPIDS'

364172 WO/PC
1424659 PRY<=2000
(PRY<=2000)

L113 77 (L23 OR L47 OR L84 OR L96) AND WO/PC AND PRY<=2000

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L114 179 (L24 OR L48 OR L85 OR L97) AND WO/PC AND PRY<=2000

=> dup rem l114

PROCESSING COMPLETED FOR L114

L115 100 DUP REM L114 (79 DUPLICATES REMOVED)

=> d tot

L115 ANSWER 1 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Methods for carbon-centered radical mediated heavy hydrogen labeling of
compounds

SO U.S., 60 pp., Cont.-in-part of U.S. 6,649,736.

CODEN: USXXAM

IN Anderson, Vernon E.; Goshe, Michael B.

AN 2003:961174 HCAPLUS

DN 140:5313

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|------------|--|----------|----------|-----------------|----------|-----|
| | ----- | ---- | ----- | ----- | ----- | |
| PI | US 6660836 | B1 | 20031209 | US 2000-579112 | 20000525 | <-- |
| | US 6649736 | B1 | 20031118 | US 1999-323741 | 19990601 | <-- |
| | WO 2000073325 | A1 | 20001207 | WO 2000-US15169 | 20000601 | <-- |
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| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | | |
| EP 1181307 | A1 | 20020227 | | EP 2000-942659 | 20000601 | <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | | |
| | US 2003208038 | A1 | 20031106 | US 2003-449299 | 20030529 | <-- |

L115 ANSWER 2 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Novel polynucleotides from **Corynebacterium glutamicum** useful
for inducing and regulating expression of genes, including those that are
involved in **amino acid biosynthesis**, in
bacterial cells;

recombinant protein production via plasmid expression in host cell for enzyme transcription regulation and amino acid production

AU RAYAPATI P J; CRAFTON C M
AN 2003-00063 BIOTECHDS
PI WO 2002040679 23 May 2002

L115 ANSWER 3 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Polynucleotide sequence from coryneform bacteria useful for the fermentative preparation of nicotinic acid or its derivatives, encodes nadC gene which is enhanced, in particular over-expressed; vector plasmid pZ-nadCex-mediated phosphoenolpyruvate-carboxykinase gene transfer and expression in host cell for use as DNA chip, DNA microarray and DNA primer

AU BASTUCK C; BATHE B; DUSCH N; MOECKEL B; THIERBACH G
AN 2003-01847 BIOTECHDS
PI WO 2002038772 16 May 2002

L115 ANSWER 4 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI New polynucleotide from coryneform bacteria coding for dep67 gene, where overexpression of the gene provides improved production of L-amino acids particularly L-lysine in **corynebacterium glutamicum**; plasmid vector-mediated recombinant protein gene transfer and expression in Escherichia coli, DNA primer, polymerase chain reaction, DNA microarray, DNA chip, DNA probe and fermentation for use in L-**amino acid and L-lysine preparation**

AU FARWICK M; HUTHMACHER K; HERMANN T; BATHE B; PFEFFERLE W
AN 2002-13587 BIOTECHDS
PI WO 2002027000 4 Apr 2002

L115 ANSWER 5 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Isolated polynucleotide from Coryneform bacteria, used for the fermentative production of L-amino acids, comprises a sequence coding for the msik gene; recombinant protein gene, vector expression in host cell, culture medium fermentation and enzyme gene useful for foodstuff and human medicine

AU BATHE B; SCHISCHKA N; FARWICK M; PFEFFERLE W
AN 2002-12995 BIOTECHDS
PI WO 2002026989 4 Apr 2002

L115 ANSWER 6 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI New dead gene encoding polypeptide having activity of DNA/RNA helicase, useful in bacteria for the fermentative preparation of L-amino acids, particularly L-lysine, from glucose, molasses, starch, cellulose or ethanol; vector-mediated gene transfer and expression in Escherichia coli, glucose, sucrose, lactose, fructose, molasses, starch, cellulose, glycerol and ethanol fermentation and DNA microarray for use in L-**lysine and L-amino-acid preparation**

AU FARWICK M; HUTHMACHER K; BREHME J; PFEFFERLE W
AN 2002-13342 BIOTECHDS
PI WO 2002026787 4 Apr 2002

L115 ANSWER 7 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI New truB gene encoding polypeptide having activity of tRNA pseudouridine 55 synthase, useful in bacteria for fermentative preparation of L-amino acids, particularly L-lysine, from glucose, molasses, starch or ethanol; vector-mediated gene transfer and expression in Escherichia coli, glucose, sucrose, lactose, fructose, molasses, starch, cellulose, glycerol and ethanol fermentation, DNA microarray and DNA chip for use in L-**lysine and L-amino-acid preparation**

AU FARWICK M; HUTHMACHER K; PFEFFERLE W; BATHE B
AN 2002-13341 BIOTECHDS
PI WO 2002026786 4 Apr 2002

L115 ANSWER 8 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Novel polynucleotide from Coryneform bacteria coding for PPGK gene,
useful as hybridization probe for detecting DNA to isolate nucleic acids,
polynucleotides or genes coding for transcription activator ppgK;
recombinant **Corynebacterium** glutamicum production useful for
L-amino acid production, especially L-lysine production

AU BATHE B; MARTENS M; HERMANN T
AN 2002-15776 BIOTECHDS
PI WO 2002026755 4 Apr 2002

L115 ANSWER 9 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Polynucleotide sequence encoding ndkA gene useful for preparation of
L-amino acids e.g. L-lysine, and as hybridization probes for discovering
RNA, cDNA and DNA to isolate genes encoding nucleotide diphosphate
kinase;
plasmid vector-mediated dihydrodipicolinate-synthase gene transfer and
expression in Escherichia coli and DNA microarray and DNA chip for use
in **L-lysine** and **L-amino-acid**
preparation

AU BATHE B; BASTUCK C; MARX A; HERMANN T
AN 2002-13337 BIOTECHDS
PI WO 2002024880 28 Mar 2002

L115 ANSWER 10 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI New ppsA gene of Coryneform bacteria, useful when overexpressed, for
increasing fermentative production of L-amino acids, encodes a
phosphoenol pyruvate synthase;
vector-mediated pyruvate-water-dikinase gene transfer and expression
in Coryneform glutamicum for enzyme activity enhancement for L-lysine
production

AU MOECKEL B; MARX A; BASTUCK C; BUCHHOLZ M; PFEFFERLE W
AN 2002-12968 BIOTECHDS
PI WO 2002022829 21 Mar 2002

L115 ANSWER 11 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Novel polynucleotide from coryneform bacteria coding for
phosphotransferase system enzyme I, useful for isolating nucleic acids,
polynucleotides or genes which code for phosphotransferase system enzyme
I;
bacterium strain improvement useful for L-amino acid, especially
L-lysine, production

AU MOECKEL B; HANS S; SCHISCHKA N; PFEFFERLE W
AN 2002-13248 BIOTECHDS
PI WO 2002022827 21 Mar 2002

L115 ANSWER 12 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI New ccsB gene of coryneform bacteria, useful when overexpressed for
increasing fermentative production of L-amino acids, encodes a cytochrome
c synthesis protein;
vector-mediated gene transfer and expression in host cell for strain
improvement and **L-amino acid preparation**

AU FARWICK M; HUTHMACHER K; PFEFFERLE W; BATHE B; HERMANN T
AN 2002-12659 BIOTECHDS
PI WO 2002022672 21 Mar 2002

L115 ANSWER 13 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI New pstC2 gene of coryneform bacteria, useful when suppressed for
increasing fermentative production of L-amino acids, encodes a
membrane-bound phosphate transporter protein;
vector-mediated gene transfer and expression in host cell for strain

improvement and L-**amino acid preparation**

AU FARWICK M; HUTHMACHER K; PFEFFERLE W; BREHME J
AN 2002-12658 BIOTECHDS
PI WO 2002022671 21 Mar 2002

L115 ANSWER 14 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI New Atr61 gene of Coryneform bacteria, useful when overexpressed, for increasing fermentative production of L-amino acids, encodes an ABC transporter protein;
vector-mediated gene transfer and expression in host cell for strain improvement and L-**lysine preparation**

AU FARWICK M; HUTHMACHER K; PFEFFERLE W
AN 2002-13089 BIOTECHDS
PI WO 2002022633 21 Mar 2002

L115 ANSWER 15 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Novel polynucleotide from Coryneform bacteria coding for lysR1 gene, useful as hybridization probe for detecting DNA coding for transcription regulator lysR1;
vector plasmid pCR2.1lysR1int-mediated gene transfer and expression in Escherichia coli and polymerase chain reaction for use in L-**lysine and L-amino-acid preparation**

AU MOECKEL B; FARWICK M; HERMANN T; KREUTZER C; PFEFFERLE W
AN 2002-11052 BIOTECHDS
PI WO 2002012295 14 Feb 2002

L115 ANSWER 16 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI Novel polynucleotide from Coryneform bacteria coding for luxR gene, useful as hybridization probe for detecting DNA to isolate nucleic acids, polynucleotides or genes coding for transcription activator luxR;
recombinant protein production, vector expression in bacterium, culture medium fermentation and transcription activator useful for L-valine and L-lysine

AU MOECKEL B; KREUTZER C; BATHE B
AN 2002-11051 BIOTECHDS
PI WO 2002012291 14 Feb 2002

L115 ANSWER 17 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
TI New coryneform bacterium in which the mdhA gene is attenuated, preferably eliminated, useful for fermentative production of L-amino acids such as L-lysine;
malate-dehydrogenase gene transfer in **Corynebacterium** glutamicum, DNA array, DNA microarray and DNA chip useful for medicine, pharmaceutical, food industry and feedstuff

AU MOLENAAR D; VAN DER REST M E; DRYSCH A
AN 2002-08500 BIOTECHDS
PI WO 2002002778 10 Jan 2002

L115 ANSWER 18 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 17
TI The nadA gene of **Corynebacterium** glutamicum encoding quinolinate synthetase A and its use in increasing yields of nicotinic acid in fermentation

SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2

IN Bastuck, Christine; Bathe, Brigitte; Dusch, Nicole; Moeckel, Bettina; Thierbach, Georg
AN 2002:368502 HCAPLUS
DN 136:385045

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| WO 2002038598 | A1 | 20020516 | WO 2001-EP12042 | 20011012 <-- |

PI
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
 UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10055869 A1 20020529 DE 2000-10055869 20001110
 US 2002137163 A1 20020926 US 2001-789599 20010222 <--
 US 6692946 B2 20040217
 AU 2002023623 A5 20020521 AU 2002-23623 20011012 <--

L115 ANSWER 19 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 18

TI Process for the fermentative preparation of L-amino acids using strains of
 the Enterobacteriaceae family

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

IN Rieping, Mechthild; Thierbach, Georg

AN 2002:353633 HCAPLUS

DN 136:354250

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| WO 2002036797 | A2 | 20020510 | WO 2001-EP11228 | 20010928 <-- |
| WO 2002036797 | A3 | 20021114 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
 UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10112107 A1 20020508 DE 2001-10112107 20010314 <--
 AU 2002015910 A5 20020515 AU 2002-15910 20010928 <--
 EP 1330526 A2 20030730 EP 2001-992788 20010928 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

L115 ANSWER 20 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 19

TI The cobW gene of **Corynebacterium** encoding a cobalamin synthesis
 related protein for use in engineering **lysine**

biosynthesis

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Schischka, Natalie; Pfefferle, Walter

AN 2002:256478 HCAPLUS

DN 136:278228

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| WO 2002026992 | A1 | 20020404 | WO 2001-EP8989 | 20010803 <-- |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10117815 A1 20020418 DE 2001-10117815 20010410 <--
 AU 2001091729 A5 20020408 AU 2001-91729 20010803 <--
 EP 1320610 A1 20030625 EP 2001-971862 20010803 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2002102668 A1 20020801 US 2001-946785 20010906 <--

L115 ANSWER 21 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 20

TI Sequence of def gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Brehme, Jennifer; Pfefferle, Walter

AN 2002:240981 HCAPLUS

DN 136:278223

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

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|----|---------------|----|----------|----------------|----------|-----|
| PI | WO 2002024922 | A1 | 20020328 | WO 2001-EP8602 | 20010725 | <-- |
|----|---------------|----|----------|----------------|----------|-----|

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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|-------------|----|----------|------------------|----------|-----|
| DE 10113957 | A1 | 20020411 | DE 2001-10113957 | 20010322 | <-- |
|-------------|----|----------|------------------|----------|-----|

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|---------------|----|----------|----------------|----------|-----|
| US 2002106750 | A1 | 20020808 | US 2001-825345 | 20010404 | <-- |
|---------------|----|----------|----------------|----------|-----|

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|---------------|----|----------|---------------|----------|-----|
| AU 2001082023 | A5 | 20020402 | AU 2001-82023 | 20010725 | <-- |
|---------------|----|----------|---------------|----------|-----|

L115 ANSWER 22 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 21

TI Sequences of thyA gene from **corynebacteria** and use thereof in
production of L-lysine

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

IN Marx, Achim; Schischka, Natalie; Bathe, Brigitte; Farwick, Mike

AN 2002:240978 HCAPLUS

DN 136:278222

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
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|----|---------------|----|----------|----------------|----------|-----|
| PI | WO 2002024919 | A1 | 20020328 | WO 2001-EP9170 | 20010808 | <-- |
|----|---------------|----|----------|----------------|----------|-----|

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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|-------------|----|----------|------------------|----------|-----|
| DE 10133162 | A1 | 20020404 | DE 2001-10133162 | 20010707 | <-- |
|-------------|----|----------|------------------|----------|-----|

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|---------------|----|----------|---------------|----------|-----|
| AU 2001079809 | A5 | 20020402 | AU 2001-79809 | 20010808 | <-- |
|---------------|----|----------|---------------|----------|-----|

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|------------|----|----------|----------------|----------|-----|
| EP 1319076 | A1 | 20030618 | EP 2001-958061 | 20010808 | <-- |
|------------|----|----------|----------------|----------|-----|

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

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|---------------|----|----------|----------------|----------|-----|
| US 2002107379 | A1 | 20020808 | US 2001-954197 | 20010918 | <-- |
|---------------|----|----------|----------------|----------|-----|

L115 ANSWER 23 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 22

TI Sequences of dctA gene from **corynebacteria** and use thereof in
production of L-lysine

SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Bathe, Brigitte; Hermann, Thomas;
Pfefferle, Walter

AN 2002:240974 HCAPLUS

DN 136:278221

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

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|----|--|----|----------|------------------|--------------|
| PI | WO 2002024915 | A1 | 20020328 | WO 2001-EP9099 | 20010807 <-- |
| | WO 2002024915 | C1 | 20020613 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | DE 10132724 | A1 | 20020411 | DE 2001-10132724 | 20010705 <-- |
| | AU 2001093731 | A5 | 20020402 | AU 2001-93731 | 20010807 <-- |
| | US 2002106759 | A1 | 20020808 | US 2001-951780 | 20010914 <-- |

L115 ANSWER 24 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 23

TI Sequences of pknB gene from **corynebacteria** and use thereof in
production of L-lysine

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

IN Bathe, Brigitte; Hans, Stephan; Farwick, Mike; Hermann, Thomas

AN 2002:220796 HCAPLUS

DN 136:261907

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|------------|------|------|-----------------|------|
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|

| | | | | | |
|----|--|----|----------|------------------|--------------|
| PI | WO 2002022828 | A1 | 20020321 | WO 2001-EP10211 | 20010905 <-- |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | DE 10120095 | A1 | 20020328 | DE 2001-10120095 | 20010425 <-- |
| | AU 2001082132 | A5 | 20020326 | AU 2001-82132 | 20010905 <-- |
| | EP 1317547 | A1 | 20030611 | EP 2001-960723 | 20010905 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | US 2002042105 | A1 | 20020411 | US 2001-949970 | 20010912 <-- |

L115 ANSWER 25 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 24

TI Sequence of atr43 gene from **corynebacteria** and use thereof in

synthesis of L-lysine

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter

AN 2002:220783 HCAPLUS

DN 136:261905

| | | | | |
|------------|------|------|-----------------|------|
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|

| | | | | | |
|----|--|----|----------|----------------|--------------|
| PI | WO 2002022814 | A2 | 20020321 | WO 2001-EP8650 | 20010726 <-- |
| | WO 2002022814 | A3 | 20020516 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |

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|---------------|----|----------|------------------|----------|-----|
| DE 10123070 | A1 | 20020411 | DE 2001-10123070 | 20010511 | <-- |
| AU 2001078509 | A5 | 20020326 | AU 2001-78509 | 20010726 | <-- |
| US 2002142404 | A1 | 20021003 | US 2001-951768 | 20010914 | <-- |

L115 ANSWER 26 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 25

TI Sequence of sugA gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter; Hermann, Thomas;
Marx, Achim

AN 2002:220643 HCAPLUS

DN 136:261901

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|---|------|----------|------------------|----------|-----|
| WO 2002022669 | A1 | 20020321 | WO 2001-EP9164 | 20010808 | <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | | |
| DE 10108839 | A1 | 20020328 | DE 2001-10108839 | 20010223 | <-- |
| AU 2001093741 | A5 | 20020326 | AU 2001-93741 | 20010808 | <-- |
| EP 1326889 | A1 | 20030716 | EP 2001-974139 | 20010808 | <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |
| US 2002127661 | A1 | 20020912 | US 2001-951753 | 20010914 | <-- |

L115 ANSWER 27 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 26

TI Sequence of gorA gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter; Marx, Achim

AN 2002:220640 HCAPLUS

DN 136:261899

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|---|------|----------|------------------|----------|-----|
| WO 2002022666 | A2 | 20020321 | WO 2001-EP9314 | 20010811 | <-- |
| WO 2002022666 | A3 | 20020725 | | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | | |
| DE 10109023 | A1 | 20020328 | DE 2001-10109023 | 20010224 | <-- |
| AU 2001095456 | A5 | 20020326 | AU 2001-95456 | 20010811 | <-- |
| EP 1317546 | A2 | 20030611 | EP 2001-976069 | 20010811 | <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |
| US 2002106758 | A1 | 20020808 | US 2001-946764 | 20010906 | <-- |

L115 ANSWER 28 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 27

TI Sequences of pknD gene from **corynebacteria** and use thereof in
production of L-lysine

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

IN Bathe, Brigitte; Schroeder, Indra; Farwick, Mike; Hermann, Thomas
AN 2002:220607 HCAPLUS
DN 136:261897

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|------------------|--------------|
| WO 2002022632 | A2 | 20020321 | WO 2001-EP10210 | 20010905 <-- |
| WO 2002022632 | A3 | 20020613 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| DE 10120094 | A1 | 20020328 | DE 2001-10120094 | 20010425 <-- |
| AU 2001095539 | A5 | 20020326 | AU 2001-95539 | 20010905 <-- |
| EP 1317545 | A2 | 20030611 | EP 2001-976189 | 20010905 <-- |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| US 2002039766 | A1 | 20020404 | US 2001-949971 | 20010912 <-- |

L115 ANSWER 29 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 28

TI Sequences of sahH gene from **corynebacteria** and use thereof in production of L-lysine or L-methionine

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Brehme, Jennifer; Pfefferle, Walter; Binder, Michael; Greissinger, Dieter; Thierbach, Georg

AN 2002:185340 HCAPLUS

DN 136:231342

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|------------------|--------------|
| WO 2002020806 | A1 | 20020314 | WO 2001-EP8222 | 20010717 <-- |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| DE 10109685 | A1 | 20020411 | DE 2001-10109685 | 20010228 <-- |
| AU 2001079755 | A5 | 20020322 | AU 2001-79755 | 20010717 <-- |
| EP 1315820 | A1 | 20030604 | EP 2001-957975 | 20010717 <-- |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| US 2003100080 | A1 | 20030529 | US 2001-919854 | 20010802 <-- |

L115 ANSWER 30 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 29

TI Sequence of luxS gene from **corynebacteria** and use thereof in **synthesis of L-lysine**

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

IN Bathe, Brigitte; Kreutzer, Caroline; Marx, Achim; Pfefferle, Walter

AN 2002:185334 HCAPLUS

DN 136:246479

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| WO 2002020799 | A2 | 20020314 | WO 2001-EP9095 | 20010807 <-- |
| WO 2002020799 | A3 | 20020530 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10112105 A1 20020321 DE 2001-10112105 20010314 <--
US 2002182689 A1 20021205 US 2001-824551 20010801 <--
AU 2001087664 A5 20020322 AU 2001-87664 20010807 <--
EP 1315818 A2 20030604 EP 2001-967238 20010807 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

L115 ANSWER 31 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 30

TI Sequence of chrA gene from **corynebacteria** and use thereof in

synthesis of L-lysine

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

IN Bathe, Brigitte; Schischka, Natalie; Marx, Achim; Pfefferle, Walter

AN 2002:185331 HCAPLUS

DN 136:246478

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|---|------------------|--------------|
| PI | WO 2002020793 | A1 | 20020314 | WO 2001-EP9098 | 20010807 <-- |
| | WO 2002020793 | C1 | 20020613 | | |
| | W: | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | RW: | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | |
| | DE 10112098 | A1 | 20020328 | DE 2001-10112098 | 20010314 <-- |
| | US 2002155554 | A1 | 20021024 | US 2001-824524 | 20010404 <-- |
| | AU 2001093730 | A5 | 20020322 | AU 2001-93730 | 20010807 <-- |

L115 ANSWER 32 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 31

TI Sequence of dep33 gene from **corynebacteria** and use thereof in

synthesis of L-lysine

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter; Hermann, Thomas;

Bathe, Brigitte

AN 2002:185330 HCAPLUS

DN 136:246477

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|---|------------------|--------------|
| PI | WO 2002020792 | A1 | 20020314 | WO 2001-EP9038 | 20010804 <-- |
| | W: | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | RW: | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | |
| | DE 10112430 | A1 | 20020321 | DE 2001-10112430 | 20010315 <-- |
| | AU 2001093723 | A5 | 20020322 | AU 2001-93723 | 20010804 <-- |

US 2002055115 A1 20020509 US 2001-948777 20010910 <--

L115 ANSWER 33 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 32
TI Sequence of hisC2 gene from **corynebacteria** and use thereof in
synthesis of L-lysine
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
IN Farwick, Mike; Huthmacher, Klaus; Bathe, Brigitte; Pfefferle, Walter
AN 2002:185322 HCAPLUS
DN 136:246476

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002020771 | A2 | 20020314 | WO 2001-EP9037 | 20010804 <-- |
| WO 2002020771 | A3 | 20020516 | | |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10108838 | A1 | 20020404 | DE 2001-10108838 | 20010223 <-- |
| AU 2001079804 | A5 | 20020322 | AU 2001-79804 | 20010804 <-- |
| US 2002106672 | A1 | 20020808 | US 2001-948649 | 20010910 <-- |

L115 ANSWER 34 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 33
TI Sequence of clpC gene from **corynebacteria** and use thereof in
synthesis of L-lysine
SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2
IN Farwick, Mike; Huthmacher, Klaus; Bathe, Brigitte; Rieping, Mechthild; Pfefferle, Walter
AN 2002:185169 HCAPLUS
DN 136:246475

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002020574 | A1 | 20020314 | WO 2001-EP9970 | 20010830 <-- |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10136987 | A1 | 20020321 | DE 2001-10136987 | 20010728 <-- |
| AU 2001085916 | A5 | 20020322 | AU 2001-85916 | 20010830 <-- |
| EP 1315744 | A1 | 20030604 | EP 2001-965231 | 20010830 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2002102669 | A1 | 20020801 | US 2001-949036 | 20010910 <-- |

L115 ANSWER 35 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 34
TI Sequences of gpmB gene from **corynebacteria** and use thereof in
production of L-lysine
SO PCT Int. Appl., 41 pp.
CODEN: PIXXD2
IN Bathe, Brigitte; Schroeder, Indra; Pfefferle, Walter
AN 2002:185168 HCAPLUS
DN 136:246474

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
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PI WO 2002020573      A2  20020314      WO 2001-EP9453      20010816 <--
WO 2002020573      A3  20020516
W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
    CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
    GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
    LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
    RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
    VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW:  GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
    DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
    BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
DE 10133668      A1  20020411      DE 2001-10133668      20010711 <--
AU 2001095470      A5  20020322      AU 2001-95470      20010816 <--
EP 1315825      A2  20030604      EP 2001-976088      20010816 <--
R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
    IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2002052486      A1  20020502      US 2001-947442      20010907 <--

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L115 ANSWER 36 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 35
TI Sequence of chrS gene from **corynebacteria** and use thereof in
synthesis of L-lysine
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
IN Bathe, Brigitte; Schischka, Natalie; Marx, Achim; Pfefferle, Walter
AN 2002:185167 HCAPLUS
DN 136:246473

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PATENT NO.      KIND  DATE      APPLICATION NO.  DATE
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PI WO 2002020572      A2  20020314      WO 2001-EP9096      20010807 <--
WO 2002020572      A3  20020808
W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
    CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
    GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
    LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
    RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
    VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW:  GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
    DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
    BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
DE 10109022      A1  20020321      DE 2001-10109022      20010224 <--
AU 2002013849      A5  20020322      AU 2002-13849      20010807 <--
EP 1315819      A2  20030604      EP 2001-982203      20010807 <--
R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
    IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2002055114      A1  20020509      US 2001-948774      20010910 <--
US 6734002      B2  20040511

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L115 ANSWER 37 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 36
TI Sequences of gap2 gene from **corynebacteria** and use thereof in
production of L-lysine
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
IN Bathe, Brigitte; Hans, Stephan; Pfefferle, Walter
AN 2002:185138 HCAPLUS
DN 136:246472

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PATENT NO.      KIND  DATE      APPLICATION NO.  DATE
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PI WO 2002020542      A2  20020314      WO 2001-EP9785      20010824 <--
WO 2002020542      A3  20020530
W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
    CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
    GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
    LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,

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PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
 UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 DE 10136985 A1 20020321 DE 2001-10136985 20010728 <--
 AU 2001091796 A5 20020322 AU 2001-91796 20010824 <--
 EP 1315745 A2 20030604 EP 2001-971961 20010824 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2002058277 A1 20020516 US 2001-948619 20010910 <--

L115 ANSWER 38 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 37

TI Sequences of metY gene from **corynebacteria** and use thereof in
 production of L-lysine or L-methionine

SO PCT Int. Appl., 57 pp.

CODEN: PIXXD2

IN Moeckel, Bettina; Pfefferle, Walter; Huthmacher, Klaus; Rueckert,
 Christian; Kalinowski, Joern; Puehler, Alfred; Binder, Michael;
 Greissinger, Dieter; Thierbach, Georg

AN 2002:172115 HCAPLUS

DN 136:231338

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|------------------|--------------|
| PI | WO 2002018613 | A1 | 20020307 | WO 2001-EP8223 | 20010717 <-- |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | DE 10109690 | A1 | 20020314 | DE 2001-10109690 | 20010228 <-- |
| | AU 2001089666 | A5 | 20020313 | AU 2001-89666 | 20010717 <-- |
| | EP 1313871 | A1 | 20030528 | EP 2001-969400 | 20010717 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | US 2002110878 | A1 | 20020815 | US 2001-919932 | 20010802 <-- |

L115 ANSWER 39 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 38

TI Sequence of sigM gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

IN Bathe, Brigitte; Bastuck, Christine; Farwick, Mike; Hermann, Thomas;
 Pfefferle, Walter

AN 2002:172101 HCAPLUS

DN 136:215517

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|------------------|--------------|
| PI | WO 2002018599 | A1 | 20020307 | WO 2001-EP9972 | 20010830 <-- |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | DE 10136984 | A1 | 20020418 | DE 2001-10136984 | 20010728 <-- |
| | AU 2001089850 | A5 | 20020313 | AU 2001-89850 | 20010830 <-- |

US 2002106755 A1 20020808 US 2001-942935 20010831 <--

L115 ANSWER 40 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 39

TI Sequence of sigH gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

IN Bathe, Brigitte; Schroeder, Indra; Rieping, Mechthild; Marx, Achim;
Farwick, Mike; Pfefferle, Walter; Hermann, Thomas

AN 2002:172100 HCAPLUS

DN 136:231337

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

| | | | | | |
|----|---------------|----|----------|----------------|--------------|
| PI | WO 2002018598 | A1 | 20020307 | WO 2001-EP9250 | 20010810 <-- |
|----|---------------|----|----------|----------------|--------------|

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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|-------------|----|----------|------------------|--------------|
| DE 10133427 | A1 | 20020314 | DE 2001-10133427 | 20010710 <-- |
|-------------|----|----------|------------------|--------------|

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|---------------|----|----------|---------------|--------------|
| AU 2001082084 | A5 | 20020313 | AU 2001-82084 | 20010810 <-- |
|---------------|----|----------|---------------|--------------|

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|---------------|----|----------|----------------|--------------|
| US 2002106756 | A1 | 20020808 | US 2001-942936 | 20010831 <-- |
|---------------|----|----------|----------------|--------------|

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|------------|----|----------|--|--|
| US 6727086 | B2 | 20040427 | | |
|------------|----|----------|--|--|

L115 ANSWER 41 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 40

TI Citb gene from **corynebacteria** and use thereof in
synthesis of L-lysine or valine

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

IN Moeckel, Bettina; Hermann, Thomas; Farwick, Mike; Pfefferle, Walter; Marx,
Achim

AN 2002:172098 HCAPLUS

DN 136:215516

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

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|----|---------------|----|----------|----------------|--------------|
| PI | WO 2002018596 | A1 | 20020307 | WO 2001-EP8387 | 20010720 <-- |
|----|---------------|----|----------|----------------|--------------|

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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|-------------|----|----------|------------------|--------------|
| DE 10108841 | A1 | 20020314 | DE 2001-10108841 | 20010223 <-- |
|-------------|----|----------|------------------|--------------|

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|---------------|----|----------|---------------|--------------|
| AU 2001079769 | A5 | 20020313 | AU 2001-79769 | 20010720 <-- |
|---------------|----|----------|---------------|--------------|

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|------------|----|----------|----------------|--------------|
| EP 1313856 | A1 | 20030528 | EP 2001-957993 | 20010720 <-- |
|------------|----|----------|----------------|--------------|

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

| | | | | |
|---------------|----|----------|----------------|--------------|
| US 2002086372 | A1 | 20020704 | US 2001-942937 | 20010831 <-- |
|---------------|----|----------|----------------|--------------|

L115 ANSWER 42 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 41

TI Sequence of sigC gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

IN Bathe, Brigitte; Hans, Stephan; Farwick, Mike; Hermann, Thomas; Pfefferle,
Walter

AN 2002:172091 HCAPLUS

DN 136:231335
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002018589 A2 20020307 WO 2001-EP9163 20010808 <--
WO 2002018589 A3 20020815
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
DE 10133426 A1 20020314 DE 2001-10133426 20010710 <--
AU 2001093740 A5 20020313 AU 2001-93740 20010808 <--
EP 1320543 A2 20030625 EP 2001-974138 20010808 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2002146782 A1 20021010 US 2001-941936 20010830 <--

L115 ANSWER 43 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 42

TI Sequences of metR and metZ gene from **corynebacteria** and use thereof in synthesis of L-methionine

SO PCT Int. Appl., 51 pp.

CODEN: PIXXD2

IN Bathe, Brigitte; Pfefferle, Walter; Huthmacher, Klaus; Rueckert, Christian; Kalinowski, Joern; Puehler, Alfred; Binder, Michael; Greissinger, Dieter; Thierbach, Georg

AN 2002:171942 HCAPLUS

DN 136:231333

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002018430 A2 20020307 WO 2001-EP8221 20010717 <--
WO 2002018430 A3 20020704
WO 2002018430 C1 20040304
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
DE 10109688 A1 20020314 DE 2001-10109688 20010228 <--
AU 2001081984 A5 20020313 AU 2001-81984 20010717 <--
EP 1313757 A2 20030528 EP 2001-960503 20010717 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2002102664 A1 20020801 US 2001-919831 20010802 <--

L115 ANSWER 44 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 43

TI Sequence of sigE gene from **corynebacteria** and use thereof in **synthesis of L-lysine**

SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

IN Moeckel, Bettina; Hermann, Thomas; Farwick, Mike; Binder, Michael; Pfefferle, Walter

AN 2002:171940 HCAPLUS

DN 136:231331

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002018428 A2 20020307 WO 2001-EP8146 20010714 <--

WO 2002018428 A3 20020606
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
DE 10126422 A1 20020314 DE 2001-10126422 20010531 <--
AU 2001085843 A5 20020313 AU 2001-85843 20010714 <--
EP 1320616 A2 20030625 EP 2001-965132 20010714 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2002103356 A1 20020801 US 2001-935757 20010824 <--

L115 ANSWER 45 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 44

TI Sequence of citA gene from **corynebacteria** and use thereof in

synthesis of L-lysine or valine

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

IN Moeckel, Bettina; Farwick, Mike; Hermann, Thomas; Marx, Achim; Pfefferle,
Walter

AN 2002:171939 HCAPLUS

DN 136:231330

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|--------------|
| WO 2002018427 | A2 | 20020307 | WO 2001-EP7766 | 20010706 <-- |
| WO 2002018427 | A3 | 20020516 | | |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, | | | | |
| CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, | | | | |
| GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, | | | | |
| LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, | | | | |
| RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, | | | | |
| VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: | | | | |
| GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, | | | | |
| DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, | | | | |
| BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10108463 | A1 | 20020314 | DE 2001-10108463 | 20010222 <-- |
| US 2002081672 | A1 | 20020627 | US 2001-804060 | 20010313 <-- |
| AU 2001093698 | A5 | 20020313 | AU 2001-93698 | 20010706 <-- |
| EP 1313760 | A2 | 20030528 | EP 2001-974079 | 20010706 <-- |
| R: | | | | |
| AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |
| IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |

L115 ANSWER 46 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 45

TI Sequences of **Corynebacterium** glutamicum gene lysR3 encoding
transcription regulator and its use in increasing yields of L-lysine and
L-valine in fermentation

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

IN Moeckel, Bettina; Kreutzer, Caroline

AN 2002:123219 HCAPLUS

DN 136:182549

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 2002012505 | A1 | 20020214 | WO 2001-EP7765 | 20010706 <-- |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, | | | | |
| CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, | | | | |
| GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, | | | | |
| LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, | | | | |
| RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, | | | | |
| VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

DE 10039049 A1 20020221 DE 2000-10039049 20000810
 US 2003100099 A1 20030529 US 2001-867537 20010531 <--
 AU 2001076385 A5 20020218 AU 2001-76385 20010706 <--
 EP 1307562 A1 20030507 EP 2001-954016 20010706 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

L115 ANSWER 47 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 46

TI Sequences of **Corynebacterium** glutamicum gene lysR2 encoding
 transcription regulator and its use in increasing yields of L-lysine and
 L-valine in fermentation

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

IN Moeckel, Bettina; Farwick, Mike; Hermann, Thomas; Kreutzer, Caroline;
 Pfefferle, Walter

AN 2002:123218 HCAPLUS

DN 136:182548

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002012504 | A1 | 20020214 | WO 2001-EP6808 | 20010615 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10110346 | A1 | 20020221 | DE 2001-10110346 | 20010303 <-- |
| AU 2001079663 | A5 | 20020218 | AU 2001-79663 | 20010615 <-- |
| EP 1307563 | A1 | 20030507 | EP 2001-957853 | 20010615 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2002081674 | A1 | 20020627 | US 2001-826909 | 20010724 <-- |

L115 ANSWER 48 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 47

TI The methH gene of **Corynebacterium** glutamicum encoding
 homocysteine methyltransferase II and its use in increasing yields of
 L-methionine in fermentation

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

IN Bathe, Brigitte; Moeckel, Bettina; Pfefferle, Walter; Huthmacher, Klaus;
 Rueckert, Christian; Kalinowski, Joern; Puehler, Alfred; Binder, Michael;
 Greissinger, Dieter; Thierbach, Georg

AN 2002:107385 HCAPLUS

DN 136:149989

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002010209 | A1 | 20020207 | WO 2001-EP8220 | 20010717 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10109687 | A1 | 20020221 | DE 2001-10109687 | 20010228 <-- |
| EP 1307475 | A1 | 20030507 | EP 2001-965135 | 20010717 <-- |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2002048793 A1 20020425 US 2001-919891 20010802 <--

L115 ANSWER 49 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 48

TI The metE gene of **Corynebacterium** glutamicum encoding
homocysteine methyltransferase I and its use in increasing yields of
L-methionine in fermentation

SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2

IN Bathe, Brigitte; Moeckel, Bettina; Pfefferle, Walter; Huthmacher, Klaus;
Rueckert, Christian; Kalinowski, Joern; Puehler, Alfred; Binder, Michael;
Greissinger, Dieter; Thierbach, Georg

AN 2002:107384 HCAPLUS

DN 136:149988

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|--------------|
| WO 2002010208 | A1 | 20020207 | WO 2001-EP8219 | 20010717 <-- |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, | | | | |
| CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, | | | | |
| GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, | | | | |
| LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, | | | | |
| RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, | | | | |
| VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, | | | | |
| DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, | | | | |
| BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10109689 | A1 | 20020221 | DE 2001-10109689 | 20010228 <-- |
| EP 1307476 | A1 | 20030507 | EP 2001-967191 | 20010717 <-- |
| R: | | | | |
| AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |
| IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2002110877 | A1 | 20020815 | US 2001-919835 | 20010802 <-- |

L115 ANSWER 50 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 49

TI The metF gene of **Corynebacterium** glutamicum encoding
methylenetetrahydrofolate reductase and its use in increasing yields of
L-methionine in fermentation

SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2

IN Bathe, Brigitte; Moeckel, Bettina; Pfefferle, Walter; Huthmacher, Klaus;
Binder, Michael; Greissinger, Dieter; Thierbach, Georg

AN 2002:107382 HCAPLUS

DN 136:149987

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|--------------|
| WO 2002010206 | A2 | 20020207 | WO 2001-EP8224 | 20010717 <-- |
| WO 2002010206 | A3 | 20020502 | | |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, | | | | |
| CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, | | | | |
| GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, | | | | |
| LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, | | | | |
| RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, | | | | |
| VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, | | | | |
| DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, | | | | |
| BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10109686 | A1 | 20020221 | DE 2001-10109686 | 20010228 <-- |
| EP 1307477 | A2 | 20030507 | EP 2001-967192 | 20010717 <-- |
| R: | | | | |
| AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |
| IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2002049305 | A1 | 20020425 | US 2001-919935 | 20010802 <-- |

L115 ANSWER 51 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 50

TI Sequences of **Corynebacterium** glutamicum genes of cysteine

biosynthesis the development of strains for **amino acid** fermentation

SO Ger. Offen., 36 pp.

CODEN: GWXXBX

IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter; Schischka, Natalie; Bathe, Brigitte

AN 2002:214906 HCAPLUS

DN 136:242992

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|------------------|--------------|
| DE 10136986 | A1 | 20020321 | DE 2001-10136986 | 20010728 <-- |
| WO 2002029029 | A2 | 20020411 | WO 2001-EP9723 | 20010823 <-- |
| WO 2002029029 | A3 | 20020613 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2002010456 | A5 | 20020415 | AU 2002-10456 | 20010823 <-- |
| EP 1320593 | A2 | 20030625 | EP 2001-978296 | 20010823 <-- |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| US 2002086373 | A1 | 20020704 | US 2001-962357 | 20010926 <-- |

L115 ANSWER 52 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 51

TI The mtrA and mtrB genes of **Corynebacterium** encoding two-component signal transduction pathway for use in engineering **lysine biosynthesis**

SO Ger. Offen., 22 pp.

CODEN: GWXXBX

AN 2002:391316 HCAPLUS

DN 136:382849

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|------------------|--------------|
| DE 10125089 | A1 | 20020523 | DE 2001-10125089 | 20010523 <-- |
| WO 2002042472 | A1 | 20020530 | WO 2001-EP12220 | 20011023 <-- |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2002023637 | A5 | 20020603 | AU 2002-23637 | 20011023 <-- |
| EP 1337649 | A1 | 20030827 | EP 2001-997557 | 20011023 <-- |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| US 2002137073 | A1 | 20020926 | US 2001-990337 | 20011123 <-- |
| US 6703223 | B2 | 20040309 | | |
| US 2003157551 | A1 | 20030821 | US 2003-411318 | 20030411 <-- |

L115 ANSWER 53 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 52

TI The cysQ gene of **Corynebacterium** encoding a transport protein for use in engineering **lysine biosynthesis**

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

IN Farwick, Mike; Huthmacher, Klaus; Bathe, Brigitte; Pfefferle, Walter

AN 2002:391291 HCAPLUS

DN 136:382848

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|------------------|--------------|
| DE 10057801 | A1 | 20020523 | DE 2000-10057801 | 20001122 |
| WO 2002042466 | A2 | 20020530 | WO 2001-EP12294 | 20011024 <-- |
| WO 2002042466 | A3 | 20030313 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002024789 A5 20020603 AU 2002-24789 20011024 <--

EP 1335980 A2 20030820 EP 2001-994615 20011024 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2002115162 A1 20020822 US 2001-987446 20011114 <--

L115 ANSWER 54 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sequences of hemD and hmB gene from **corynebacteria** and use thereof in production of L-lysine

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter; Schischka, Natalie; Marx, Achim

AN 2002:332215 HCAPLUS

DN 136:354247

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| WO 2002034775 | A2 | 20020502 | WO 2001-EP11705 | 20011010 <-- |
| WO 2002034775 | A3 | 20020919 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10145585 A1 20020502 DE 2001-10145585 20010915 <--

AU 2002018223 A5 20020506 AU 2002-18223 20011010 <--

L115 ANSWER 55 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Materials and methods to modulate ligand binding/enzymic activity of α/β proteins containing an allosteric regulatory site

SO PCT Int. Appl., 163 pp.

CODEN: PIXXD2

IN Stauton, Donald E.

AN 2002:293978 HCAPLUS

DN 136:337341

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| WO 2002031511 | A2 | 20020418 | WO 2001-US32047 | 20011012 <-- |
| WO 2002031511 | A3 | 20030313 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002013196 A5 20020422 AU 2002-13196 20011012 <--
 US 2003088061 A1 20030508 US 2001-976935 20011012 <--
 EP 1325341 A2 20030709 EP 2001-981560 20011012 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004511496 T2 20040415 JP 2002-534845 20011012 <--

L115 ANSWER 56 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Process for the fermentative preparation of D-pantothenic acid using coryneform bacteria with **poxb** gene being eliminated
 SO PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 IN Dusch, Nicole; Hermann, Thomas; Thierbach, Georg
 AN 2002:276126 HCAPLUS
 DN 136:308622

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|----|---------------|------|----------|--|----------|-----|
| PI | WO 2002029020 | A1 | 20020411 | WO 2001-EP10212 | 20010905 | <-- |
| | W: | | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | RW: | | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | |
| | DE 10117085 | A1 | 20020411 | DE 2001-10117085 | 20010406 | <-- |
| | AU 2001091825 | A5 | 20020415 | AU 2001-91825 | 20010905 | <-- |
| | EP 1320586 | A1 | 20030625 | EP 2001-972003 | 20010905 | <-- |
| | R: | | | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | |
| | US 2002150999 | A1 | 20021017 | US 2001-965825 | 20011001 | <-- |

L115 ANSWER 57 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Sequence of mikiE17 gene from **corynebacteria** and use thereof in **synthesis** of L-lysine
 SO PCT Int. Appl., 44 pp.
 CODEN: PIXXD2
 IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter
 AN 2002:256495 HCAPLUS
 DN 136:293614

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|----|---------------|------|----------|--|----------|-----|
| PI | WO 2002027009 | A1 | 20020404 | WO 2001-EP8781 | 20010728 | <-- |
| | W: | | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | RW: | | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | |
| | DE 10113958 | A1 | 20020418 | DE 2001-10113958 | 20010322 | <-- |
| | US 2002106749 | A1 | 20020808 | US 2001-825293 | 20010404 | <-- |
| | AU 2001095445 | A5 | 20020408 | AU 2001-95445 | 20010728 | <-- |

L115 ANSWER 58 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN
 TI Coryneform bacteria menE gene encoding o-succinylbenzoic acid coA ligase and a method for fermentative preparation of amino acids in bacteria in

which the menE gene is attenuated
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter; Marx, Achim
AN 2002:240996 HCAPLUS
DN 136:258366

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002024937 | A1 | 20020328 | WO 2001-EP9221 | 20010809 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10112106 | A1 | 20020328 | DE 2001-10112106 | 20010314 <-- |
| US 2002102663 | A1 | 20020801 | US 2001-834722 | 20010416 <-- |
| AU 2001079811 | A5 | 20020402 | AU 2001-79811 | 20010809 <-- |
| EP 1319084 | A1 | 20030618 | EP 2001-958064 | 20010809 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |

L115 ANSWER 59 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Sequence of pepC gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
IN Farwick, Mike; Huthmacher, Klaus; Bathe, Brigitte; Rieping, Mechthild;
Pfefferle, Walter
AN 2002:240987 HCAPLUS
DN 136:278224

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002024928 | A1 | 20020328 | WO 2001-EP8708 | 20010727 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10108828 | A1 | 20020328 | DE 2001-10108828 | 20010223 <-- |
| US 2002098554 | A1 | 20020725 | US 2001-804073 | 20010313 <-- |
| AU 2001089765 | A5 | 20020402 | AU 2001-89765 | 20010727 <-- |

L115 ANSWER 60 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Sequences of dps gene from **corynebacteria** and use thereof in
production of L-lysine

SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
IN Bathe, Brigitte; Kreutzer, Caroline; Rieping, Mechthild; Marx, Achim;
Farwick, Mike; Pfefferle, Walter
AN 2002:240813 HCAPLUS
DN 136:278218

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 2002024737 | A1 | 20020328 | WO 2001-EP10523 | 20010912 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, | | | | |

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
 UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 DE 10046623 A1 20020328 DE 2000-10046623 20000920
 AU 2002012232 A5 20020402 AU 2002-12232 20010912 <--
 EP 1319019 A1 20030618 EP 2001-980373 20010912 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2002106760 A1 20020808 US 2001-955315 20010919 <--

L115 ANSWER 61 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sequence of tmk gene from **corynebacteria** and use thereof in

synthesis of L-lysine

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Marx, Achim; Pfefferle, Walter

AN 2002:240792 HCAPLUS

DN 136:278217

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002024716 | A2 | 20020328 | WO 2001-EP10268 | 20010906 <-- |
| WO 2002024716 | A3 | 20021205 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10140095 | A1 | 20020328 | DE 2001-10140095 | 20010816 <-- |
| AU 2002014966 | A5 | 20020402 | AU 2002-14966 | 20010906 <-- |
| EP 1319077 | A2 | 20030618 | EP 2001-983465 | 20010906 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2002137065 | A1 | 20020926 | US 2001-955203 | 20010919 <-- |

L115 ANSWER 62 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sequence of dep34 gene from **corynebacteria** and use thereof in

synthesis of L-lysine

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter; Hermann, Thomas;
 Bathe, Brigitte

AN 2002:220807 HCAPLUS

DN 136:261909

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| WO 2002022843 | A2 | 20020321 | WO 2001-EP9313 | 20010811 <-- |
| WO 2002022843 | A3 | 20020711 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |

DE 10112429 A1 20020321 DE 2001-10112429 20010315 <--
 AU 2002019032 A5 20020326 AU 2002-19032 20010811 <--
 EP 1315815 A2 20030604 EP 2001-984655 20010811 <--
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 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2002106757 A1 20020808 US 2001-946763 20010906 <--

L115 ANSWER 63 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sequences of ftsX gene from **corynebacteria** and use thereof in
 production of L-lysine

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter; Brehme, Jennifer;
 Rieping, Mechthild

AN 2002:220644 HCAPLUS

DN 136:261902

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002022670 | A1 | 20020321 | WO 2001-EP9375 | 20010814 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10132176 | A1 | 20020321 | DE 2001-10132176 | 20010703 <-- |
| AU 2001087682 | A5 | 20020326 | AU 2001-87682 | 20010814 <-- |
| US 2002107377 | A1 | 20020808 | US 2001-946769 | 20010906 <-- |

L115 ANSWER 64 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sequences of rodA gene from **corynebacteria** and use thereof in
 production of L-lysine

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

IN Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter; Bathe, Brigitte

AN 2002:220642 HCAPLUS

DN 136:261900

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002022668 | A1 | 20020321 | WO 2001-EP9097 | 20010807 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10132947 | A1 | 20020321 | DE 2001-10132947 | 20010706 <-- |
| AU 2001085878 | A5 | 20020326 | AU 2001-85878 | 20010807 <-- |
| US 2002051993 | A1 | 20020502 | US 2001-950071 | 20010912 <-- |

L115 ANSWER 65 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sequence of cstA gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

IN Moeckel, Bettina; Marx, Achim; Pfefferle, Walter; Farwick, Mike; Hermann,
 Thomas

AN 2002:172099 HCAPLUS

DN 136:231336

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002018597 | A1 | 20020307 | WO 2001-EP8601 | 20010725 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10042051 | A1 | 20020307 | DE 2000-10042051 | 20000826 |
| AU 2001082022 | A5 | 20020313 | AU 2001-82022 | 20010725 <-- |
| EP 1311683 | A1 | 20030521 | EP 2001-960554 | 20010725 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2002137912 | A1 | 20020926 | US 2001-935799 | 20010824 <-- |

L115 ANSWER 66 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sequence of oxyR gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 50 pp.
 CODEN: PIXXD2

IN Marx, Achim; Farwick, Mike; Hermann, Thomas; Schischka, Natalie; Bathe,
 Brigitte

AN 2002:171943 HCAPLUS

DN 136:231334

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2002018431 | A1 | 20020307 | WO 2001-EP8388 | 20010720 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10110053 | A1 | 20020307 | DE 2001-10110053 | 20010302 <-- |
| AU 2001089706 | A5 | 20020313 | AU 2001-89706 | 20010720 <-- |
| EP 1313758 | A1 | 20030528 | EP 2001-969448 | 20010720 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2002064839 | A1 | 20020530 | US 2001-938641 | 20010827 <-- |

L115 ANSWER 67 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sequence of ccpA2 gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 43 pp.
 CODEN: PIXXD2

IN Moeckel, Bettina; Kreutzer, Caroline; Hermann, Thomas; Farwick, Mike;
 Marx, Achim; Pfefferle, Walter

AN 2002:171941 HCAPLUS

DN 136:231332

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 2002018429 | A1 | 20020307 | WO 2001-EP7386 | 20010628 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, | | | | |

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
 ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 DE 10123071 A1 20020307 DE 2001-10123071 20010511 <--
 AU 2001091658 A5 20020313 AU 2001-91658 20010628 <--
 EP 1313759 A1 20030528 EP 2001-971740 20010628 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2002068336 A1 20020606 US 2001-938642 20010827 <--
 US 6689586 B2 20040210

L115 ANSWER 68 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Sequence of ccpA1 gene from **corynebacteria** and use thereof in
synthesis of L-lysine

SO PCT Int. Appl., 38 pp. o

CODEN: PIXXD2

IN Moeckel, Bettina; Kreutzer, Caroline

AN 2002:171931 HCAPLUS

DN 136:231329

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| WO 2002018419 | A2 | 20020307 | WO 2001-EP8356 | 20010719 <-- |
| WO 2002018419 | A3 | 20021031 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG DE 10110052 A1 20020307 DE 2001-10110052 20010302 <-- AU 2002012114 A5 20020313 AU 2002-12114 20010719 <-- EP 1311685 A2 20030521 EP 2001-980214 20010719 <-- R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 2002151001 A1 20021017 US 2001-938540 20010827 <-- | | | | |

L115 ANSWER 69 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Nucleotide sequence of the lldd2 gene of **Corynebacterium** coding
 for lactate dehydrogenase for use in increasing yields in amino acid
 fermentation

SO Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

IN Farwick, Mike; Huthmacher, Klaus; Bathe, Brigitte; Pfefferle, Walter

AN 2002:183815 HCAPLUS

DN 136:246469

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| EP 1186657 | A1 | 20020313 | EP 2001-117811 | 20010721 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO DE 10044681 A1 20020321 DE 2000-10044681 20000909 WO 2002059329 A1 20020801 WO 2001-EP797 20010125 <-- W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, | | | | |

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 EP 1354051 A1 20031022 EP 2001-919248 20010125
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2002055152 A1 20020509 US 2001-946142 20010905 <--

L115 ANSWER 70 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Fermentative production of L-amino acids with **poxB** mutants of
 Enterobacteriaceae

SO Ger. Offen., 22 pp.

CODEN: GWXXBX

IN Thierbach, Georg; Rieping, Mechthild

AN 2002:349112 HCAPLUS

DN 136:354249

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|------------------|--------------|
| PI | DE 10112107 | A1 | 20020508 | DE 2001-10112107 | 20010314 <-- |
| | WO 2002036797 | A2 | 20020510 | WO 2001-EP11228 | 20010928 <-- |
| | WO 2002036797 | A3 | 20021114 | | |
| | W: | | | | |
| | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, | | | | |
| | CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, | | | | |
| | GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, | | | | |
| | LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, | | | | |
| | PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, | | | | |
| | UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: | | | | |
| | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, | | | | |
| | DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, | | | | |
| | BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | AU 2002015910 | A5 | 20020515 | AU 2002-15910 | 20010928 <-- |
| | EP 1330526 | A2 | 20030730 | EP 2001-992788 | 20010928 <-- |
| | R: | | | | |
| | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |
| | IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | US 2003017554 | A1 | 20030123 | US 2002-76416 | 20020219 <-- |

L115 ANSWER 71 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI New hemD and hemB genes and polypeptides of coryneform bacteria, useful,
 when overexpressed, for increasing fermentative production of amino acids.

PI DE 10145585 A1 20020502 (200248)* 24 C12N015-52
 WO 2002034775 A2 20020502 (200248) EN C07K014-34 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO
 RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2002018223 A 20020506 (200257) C07K014-34
 IN FARWICK, M; HUTHMACHER, K; MARX, A; PFEFFERLE, W; SCHISCHKA, N

L115 ANSWER 72 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI New tmk gene of Coryneform bacteria, useful when suppressed, for
 increasing fermentative production of L-amino acids, encodes a thymidylate
 kinase.

PI DE 10140095 A1 20020328 (200238)* 17 C12N015-54
 WO 200204716 A2 20020328 (200238) EN C07H021-00 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO
 RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2002014966 A 20020402 (200252) C07H021-00
 US 2002137065 A1 20020926 (200265) C12Q001-68
 EP 1319077 A2 20030618 (200340) EN C12N015-54

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI TR

IN FARWICK, M; HUTHMACHER, K; MARX, A; PFEFFERLE, W

L115 ANSWER 73 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI RodA genes from coryneform bacteria, useful, when overexpressed, for increasing fermentative production of L-amino acid, especially L-lysine.

PI DE 10132947 A1 20020321 (200241)* 18 C12N015-31
US 2002051993 A1 20020502 (200241) C12Q001-68
WO 2002022668 A1 20020321 (200241) EN C07K014-34 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2001085878 A 20020326 (200251) C07K014-34

IN BATHE, B; FARWICK, M; HUTHMACHER, K; PFEFFERLE, W

L115 ANSWER 74 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI New ftsX gene from coryneform bacteria, useful, when over expressed, for increasing fermentative production of L-amino acid, especially L-lysine.

PI DE 10132176 A1 20020321 (200241)* 17 C12N015-31
WO 2002022670 A1 20020321 (200241) EN C07K014-34 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2001087682 A 20020326 (200251) C07K014-34
US 2002107377 A1 20020808 (200254) C12Q001-68

IN BREHME, J; FARWICK, M; HUTHMACHER, K; PFEFFERLE, W; RIEPING, M

L115 ANSWER 75 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI New ccpA2 gene from coryneform bacteria, useful, when suppressed, for increasing fermentative production of L-amino acids, particularly lysine.

PI DE 10123071 A1 20020307 (200240)* 16 C07H021-00
WO 2002018429 A1 20020307 (200240) EN C07K014-34 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
US 2002068336 A1 20020606 (200241) C12P013-08
AU 2001091658 A 20020313 (200249) C07K014-34
EP 1313759 A1 20030528 (200336) EN C07K014-34
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI TR

US 6689586 B2 20040210 (200413) C12P021-06
IN FARWICK, M; HERMANN, T; KREUTZER, C; MARX, A; MOECKEL, B; PFEFFERLE, W;
GARWICK, M

L115 ANSWER 76 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI Fermentative production of D-pantothenic acid (I), useful e.g. in animal nutrition, from coryneform bacteria with reduced activity of the **pyruvate oxidase** gene.

PI DE 10117085 A1 20020411 (200240)* 27 C12N015-52
WO 2002029020 A1 20020411 (200240) EN C12N009-02 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO
 RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2001091825 A 20020415 (200254) C12N009-02
 US 2002150999 A1 20021017 (200270) C12P013-04
 EP 1320586 A1 20030625 (200341) EN C12N009-02
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 IN DUSCH, N; HERRMANN, T; THIERBACH, G; HERMANN, T; THOMAS, H

L115 ANSWER 77 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New dep34 gene from coryneform bacteria, useful, when inactivated, for
 increasing fermentative production of L-amino acid, especially L-lysine.
 PI DE 10112429 A1 20020321 (200236)* 17 C12N001-21
 WO 2002022843 A2 20020321 (200236) EN C12P013-00 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
 SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2002019032 A 20020326 (200251) C12P013-00
 US 2002106757 A1 20020808 (200254) C12P013-08
 EP 1315815 A2 20030604 (200337) EN C12N015-31
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 IN BATHE, B; FARWICK, M; HERMANN, T; HUTHMACHER, K; PFEFFERLE, W

L115 ANSWER 78 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New menE gene of coryneform bacteria, useful when suppressed for
 increasing fermentative production of L-amino acids, encodes an
 O-succinylbenzoic acid CoA-ligase.
 PI DE 10112106 A1 20020328 (200237)* 16 C12N009-00
 WO 2002024937 A1 20020328 (200237) EN C12P013-08 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
 SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2001079811 A 20020402 (200252) C12P013-08
 US 2002102663 A1 20020801 (200253) C12P013-04
 EP 1319084 A1 20030618 (200340) EN C12P013-08
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 CN 1461346 A 20031210 (200415) C12P013-08
 IN FARWICK, M; HUTHMACHER, K; MARX, A; PFEFFERLE, W

L115 ANSWER 79 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI Fermentative production of L-amino acids, especially lysine or valine, by
 fermenting Coryneform bacteria in which the nadA and/or nadC gene is
 weakened.
 PI DE 10110344 A1 20020516 (200271)* 23 C12N015-11
 AU 2002021715 A 20020521 (200271) C12P013-08
 WO 2002038788 A2 20020516 (200271) EN C12P013-08 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO
 RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 US 2002168732 A1 20021114 (200277) C12P013-08
 EP 1414985 A2 20040506 (200430) EN C12P013-08
 R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
 IN HERMANN, T; MOECKEL, B; PFEFFERLE, W

L115 ANSWER 80 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New oxyR gene from coryneform bacteria, useful, when overexpressed, for increasing fermentative production of L-amino acids, particularly lysine.
 PI DE 10110053 A1 20020307 (200240)* 18 C12N015-11
 US 2002064839 A1 20020530 (200240) C12P013-08
 WO 2002018431 A1 20020307 (200240) EN C07K014-34 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
 SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2001089706 A 20020313 (200249) C07K014-34
 EP 1313758 A1 20030528 (200336) EN C07K014-34
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 IN BATHE, B; FARWICK, M; HERMANN, T; MARX, A; SCHISCHKA, N

L115 ANSWER 81 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New ccpA1 gene from coryneform bacteria, useful, when suppressed, for increasing fermentative production of L-amino acids, particularly lysine.
 PI DE 10110052 A1 20020307 (200240)* 16 C12N015-11
 WO 2002018419 A2 20020307 (200240) EN C07K014-00 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
 SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2002012114 A 20020313 (200249) C07K014-00
 US 2002151001 A1 20021017 (200270) C12P013-04
 EP 1311685 A2 20030521 (200334) EN C12N015-31
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 IN KREUTZER, C; MOECKEL, B

L115 ANSWER 82 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New pepC gene of Coryneform bacteria, useful when suppressed, for increasing fermentative production of L-amino acids, encodes an aminopeptidase I.
 PI DE 10108828 A1 20020328 (200237)* 16 C12N015-52
 WO 2002024928 A1 20020328 (200237) EN C12N015-57 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
 SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2001089765 A 20020402 (200252) C12N015-57
 US 2002098554 A1 20020725 (200254) C12P013-04
 IN BATHE, B; FARWICK, M; HUTHMACHER, K; PFEFFERLE, W; RIEPING, M

L115 ANSWER 83 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New dps gene of coryneform bacteria, useful when overexpressed, for increasing fermentative production of L-amino acids, encodes a DNA-protection protein.
 PI DE 10046623 A1 20020328 (200237)* 11 C12N001-21
 WO 2002024737 A1 20020328 (200237) EN C07K014-34 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO

RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2002012232 A 20020402 (200252) C07K014-34
 US 2002106760 A1 20020808 (200254) C12P013-08
 EP 1319019 A1 20030618 (200340) EN C07K014-34
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 IN BATHE, B; FARWICK, M; KREUTZER, C; MARX, A; PFEFFERLE, W; RIEPING, M

L115 ANSWER 84 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New cstA gene from coryneform bacteria, useful, when overexpressed, for
 increasing fermentative production of L-amino acids e.g. lysine and as
 hybridization probe.
 PI DE 10042051 A1 20020307 (200234)* 15 C07H021-00
 WO 2002018597 A1 20020307 (200234) EN C12N015-31 <--
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
 SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2001082022 A 20020313 (200249) C12N015-31
 US 2002137912 A1 20020926 (200265) C12P013-08
 EP 1311683 A1 20030521 (200334) EN C12N015-31
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 IN FARWICK, M; HERMANN, T; MARX, A; MOECKEL, B; PFEFFERLE, W; MOCKEL, B

L115 ANSWER 85 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI **Corynebacterium**-originated **glucose-6-phosphate dehydrogenase**, modified to improve
 productivity of an L-amino acid, e.g., L-lysine, by a microorganism;
 vector-mediated gene transfer and expression in host cell for
 recombinant protein production
 AU YOKOI H; ANDO S; OCHIAI K; YONETANI Y; HASHIMOTO S
 AN 2002-09438 BIOTECHDS
 PI WO 2001098472 27 Dec 2001

L115 ANSWER 86 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Preparing L-amino acids by fermenting coryneform bacteria transformed
 with the **glucose-6-phosphate-dehydrogenase** gene is particularly useful to produce L-lysine and
 L-threonine;
 which are useful in animal nutrition, human medicine, and
 pharmaceutical industry
 AU Burke K; Sahm H; Eggeling L; Moritz B; Dunican L K; McCormack A;
 Stapelton C; Moekel B; Thierbach G
 AN 2002-02626 BIOTECHDS
 PI WO 2001070995 27 Sep 2001

L115 ANSWER 87 OF 100 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI New polynucleotide sequences derived from **Corynebacterium**
 glutamicum, useful as primers for preparing DNA of genes that display an
 effect corresponding to the opcA gene by the polymerase chain reaction,
 or as hybridization probes;
 L-lysine production, DNA probe and DNA primer
 AU Dunican L K; McCormack A; Stapelton C; Burke K; Moritz B; Eggeling L;
 Sahm H; Moeckel B; Weissenborn A
 AN 2001-08007 BIOTECHDS
 PI WO 2001004322 18 Jan 2001

L115 ANSWER 88 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 56
 TI The glbO gene of **Corynebacterium** glutamicum encoding Hb-like
 protein and its use in increasing yields of lysine in fermentation
 SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2
IN Moeckel, Bettina; Marx, Achim; Pfefferle, Walter
AN 2001:904501 HCAPLUS
DN 136:36482

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|--------------|
| PI | WO 2001094569 | A2 | 20011213 | WO 2001-EP4792 | 20010427 <-- |
| | WO 2001094569 | A3 | 20020321 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 2002081673 | A1 | 20020627 | US 2001-813932 | 20010322 <-- |
| | EP 1287143 | A2 | 20030305 | EP 2001-940376 | 20010427 <-- |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |

L115 ANSWER 89 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 57
TI Process for the fermentative preparation of L-amino acids in coryneform bacteria with amplification of the gnd gene

SO PCT Int. Appl., 59 pp.

CODEN: PIXXD2

IN Dunica, L. K.; McCormack, Ashling; Stapelton, Cliona; Burke, Kevin; Moeckel, Bettina

AN 2001:713591 HCAPLUS

DN 135:268190

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|--------------|
| PI | WO 2001071012 | A1 | 20010927 | WO 2000-EP6299 | 20000705 <-- |
| | W: | AU, BR, CA, CN, HU, ID, JP, KR, MX, PL, RU, SK, UA, ZA | | | |
| | RW: | AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | |
| | EP 1179076 | A1 | 20020213 | EP 2000-951336 | 20000705 <-- |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | |
| | BR 2000010817 | A | 20020305 | BR 2000-10817 | 20000705 <-- |

L115 ANSWER 90 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 58
TI Process for the fermentative preparation of L-amino acids with amplification of the tkt gene

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

IN Dunican, L. K.; McCormack, Ashling; Stapelton, Cliona; Burke, Kevin; Moeckel, Bettina; Thierbach, Georg

AN 2001:693552 HCAPLUS

DN 135:252777

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|--------------|
| PI | WO 2001068894 | A1 | 20010920 | WO 2000-EP6305 | 20000705 <-- |
| | W: | AU, BR, CA, CN, HU, ID, JP, KR, MX, PL, RU, SK, UA, ZA | | | |
| | RW: | AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | |
| | BR 2000010713 | A | 20020213 | BR 2000-10713 | 20000705 <-- |
| | EP 1179084 | A1 | 20020213 | EP 2000-945875 | 20000705 <-- |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | |

L115 ANSWER 91 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 59
TI **Corynebacterium** glutamicum genes encoding metabolic pathway

proteins
SO PCT Int. Appl., 316 pp.
CODEN: PIXXD2
IN Pompejus, Markus; Kroeger, Burkhard; Schroeder, Hartwig; Zelder, Oskar;
Haberhauer, Gregor; Kim, Jun-Won; Lee, Heung-Shick; Hwang, Byung-Joon
AN 2001:676795 HCAPLUS
DN 135:222397

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|--|-----------------|--------------|
| PI | WO 2001066573 | A2 | 20010913 | WO 2000-IB2035 | 20001222 <-- |
| | WO 2001066573 | A3 | 20020510 | | |
| | W: | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | RW: | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | |
| EP | 1261718 | A2 | 20021204 | EP 2000-987602 | 20001222 <-- |
| | R: | | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | |
| BR | 2000017148 | A | 20030311 | BR 2000-17148 | 20001222 <-- |
| JP | 2003525623 | T2 | 20030902 | JP 2001-565737 | 20001222 <-- |

L115 ANSWER 92 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 60
TI Increasing yields of amino acids from microbial hosts by increasing intracellular levels of NADPH

SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
IN O'Donohue, Michael R.; Hanke, Paul D.
AN 2001:78542 HCAPLUS
DN 134:146503

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|--|-----------------|--------------|
| PI | WO 2001007626 | A2 | 20010201 | WO 2000-US19914 | 20000721 <-- |
| | WO 2001007626 | A3 | 20010531 | | |
| | W: | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | RW: | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | |
| BR | 2000012712 | A | 20020409 | BR 2000-12712 | 20000721 <-- |
| EP | 1208205 | A2 | 20020529 | EP 2000-950529 | 20000721 <-- |
| | R: | | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | |
| US | 6465238 | B1 | 20021015 | US 2000-621451 | 20000721 <-- |
| JP | 2003521888 | T2 | 20030722 | JP 2001-512892 | 20000721 <-- |
| ZA | 2002001268 | A | 20030303 | ZA 2002-1268 | 20020214 <-- |
| US | 2003017557 | A1 | 20030123 | US 2002-223355 | 20020820 <-- |
| US | 6680190 | B2 | 20040120 | | |

L115 ANSWER 93 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 61
TI Sequences of Coryneform bacteria tal gene and uses thereof in fermentative preparation of L-amino acids

SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
IN Dunican, L. K.; McCormack, Ashling; Stapelton, Cliona; Burke, Kevin; Mockel, Bettina

AN 2001:50828 HCAPLUS
DN 134:111274

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|--------------|
| PI | WO 2001004325 | A1 | 20010118 | WO 2000-EP6304 | 20000705 <-- |
| | W: AU, BR, CA, CN, HU, ID, JP, KR, MX, PL, RU, SK, UA, ZA | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 1109915 | A1 | 20010627 | EP 2000-956165 | 20000705 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | BR 2000006915 | A | 20010731 | BR 2000-6915 | 20000705 <-- |
| | AU 768599 | B2 | 20031218 | AU 2000-68220 | 20000705 <-- |
| | ZA 2001001703 | A | 20020528 | ZA 2001-1703 | 20010228 <-- |
| | ZA 2001001678 | A | 20020815 | ZA 2001-1678 | 20010228 <-- |

L115 ANSWER 94 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Genetically modified Coryneform bacteria with overexpressed pgsA2 gene and uses thereof in fermentative preparation of L-amino acids
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2

IN Nampoothiri, Madhavan; Moeckel, Bettina; Pfefferle, Walter; Eggeling, Lothar; Sahm, Hermann

AN 2001:816923 HCAPLUS
DN 135:353875

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|------------------|--------------|
| PI | WO 2001083766 | A1 | 20011108 | WO 2001-EP4704 | 20010426 <-- |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | DE 10021829 | A1 | 20011108 | DE 2000-10021829 | 20000504 |
| | EP 1278865 | A1 | 20030129 | EP 2001-940367 | 20010426 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |

L115 ANSWER 95 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Genetically modified Coryneform bacteria with overexpressed cdsA gene and uses thereof in fermentative preparation of L-amino acids
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2

IN Nampoothiri, Madhavan; Moeckel, Bettina; Pfefferle, Walter; Eggeling, Lothar; Sahm, Hermann

AN 2001:816922 HCAPLUS
DN 135:353874

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|--------------|
| PI | WO 2001083765 | A2 | 20011108 | WO 2001-EP3704 | 20010331 <-- |
| | WO 2001083765 | A3 | 20020404 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |

DE 10021828 A1 20011108 DE 2000-10021828 20000504
 EP 1278861 A2 20030129 EP 2001-933786 20010331 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

L115 ANSWER 96 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Genetically modified Coryneform bacteria with overexpressed fadD15 gene
 and uses thereof in fermentative preparation of L-amino acids

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

IN Nampoothiri, Madhavan; Moeckel, Bettina; Pfefferle, Walter; Eggeling,
 Lothar; Sahm, Hermann

AN 2001:816916 HCAPLUS

DN 135:353870

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|--------------|
| WO 2001083759 | A1 | 20011108 | WO 2001-EP4706 | 20010426 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10021831 | A1 | 20011108 | DE 2000-10021831 | 20000504 |
| EP 1278857 | A1 | 20030129 | EP 2001-940368 | 20010426 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |

L115 ANSWER 97 OF 100 HCAPLUS COPYRIGHT 2004 ACS on STN

TI Manufacture of five-carbon sugars and sugar alcohols using microorganisms
 deficient in or transformed with genes involved in pentose-phosphate
 pathway

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IN Miasnikov, Andrei; Ojamo, Heikki; Povelainen, Mira; Gros, Hakan; Toivari,
 Mervi; Richard, Peter; Ruohonen, Laura; Koivuranta, Kari; Londesborough,
 John; Aristidou, Aristos; Penttilae, Merja; Plazanet-Menut, Claire;
 Deutscher, Josef

AN 2001:545704 HCAPLUS

DN 135:136473

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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2001031784 | A5 | 20010731 | AU 2001-31784 | 20010122 <-- |
| BR 2001007918 | A | 20021105 | BR 2001-7918 | 20010122 <-- |
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| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
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L115 ANSWER 98 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New mutant coryneform bacterium, useful for production of amino acids,
 especially lysine, has increased activity of acyl-CoA synthase.
 PI DE 10021831 A1 20011108 (200204)* 14 C07H021-00
 WO 2001083759 A1 20011108 (200204) EN C12N015-52 <--
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 LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
 SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2001073971 A 20011112 (200222) C12N015-52
 US 2002042107 A1 20020411 (200227) C12Q001-68
 EP 1278857 A1 20030129 (200310) EN C12N015-52
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 KR 2002097248 A 20021231 (200330) C12N001-21
 IN EGGELING, L; MADHAVAN, N; MOECKEL, B; PFEFFERLE, W; SAHM, H; MOCKEL, B;
 NAMPOOTHIRI, K M; NAMPOOTHIRI, M

L115 ANSWER 99 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New mutant coryneform bacterium, useful for production of amino acids,
 especially lysine, has increased activity of CDP-diacylglycerol-3-
 phosphate 3-phosphatidyltransferase.
 PI DE 10021829 A1 20011108 (200204)* 14 C07H021-00
 WO 2001083766 A1 20011108 (200204) EN C12N015-54 <--
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 SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2001073970 A 20011112 (200222) C12N015-54
 US 2002155555 A1 20021024 (200273) C12P013-08
 EP 1278865 A1 20030129 (200310) EN C12N015-54
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 KR 2002097244 A 20021231 (200330) C12N001-21
 IN EGGELING, L; MADHAVAN, N; MOECKEL, B; PFEFFERLE, W; SAHM, H; MOCKEL, B;
 NAMPOOTHIRI, K M; NAMPOOTHIRI, M

L115 ANSWER 100 OF 100 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 TI New mutant coryneform bacterium, useful for production of amino acids,
 especially lysine, has increased activity of phosphatidate-cytidylyl
 transferase.
 PI DE 10021828 A1 20011108 (200203)* 16 C07H021-00
 WO 2001083765 A2 20011108 (200203) EN C12N015-54 <--
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 SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
 AU 2001060174 A 20011112 (200222) C12N015-54
 EP 1278861 A2 20030129 (200310) EN C12N015-54
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 KR 2002097245 A 20021231 (200330) C12N001-21
 US 2004092710 A1 20040513 (200432) C07K001-00
 IN EGGELING, L; MOECKEL, B; NAMPOOTHIRI, M; PFEFFERLE, W; SAHM, H; MOCKEL, B;
 NAMPOOTHIRI, K M

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COST IN U.S. DOLLARS

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166.63

378.70

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ENTRY

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SESSION

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